STIC Scientific and Technical Information Center

Search Report
EIC 3600

STIC Database Tracking Number: 353327

To: John Pauls	From:Eileen Patton
Location: KNX 5D51	Location: EIC3600
Art Unit: 3686	KNX 2D08A
Date: 01/21/2011	Phone: (571) 272-3413
Case Serial Number: 10/553877	eileen.patton@uspto.gov

Search Notes

Dear Examiner Pauls :

Please find attached the results of your search for the above-referenced case. The search was conducted in Dialog, ProQuest and EBSCOhost. A full template search was conducted.

I have listed *potential* references of interest in the first part of the search results. However, please be sure to scan through the entire report. There may be additional references that you might find useful.

If you have any questions about the search, or need a refocus, please do not hesitate to contact me.

Thank you for using the EIC, and we look forward to your next search!

**EIC-Searcher identified "potential references of interest" are selected based upon their apparent relevance to the terms/concepts provided in the examiner's search request.*

I. Potential References of Interest

A. Dialog

31/9,K/2 (Item 1 from file: 636)
DIALOG(R)File 636: Gale Group Newsletter DB(TM)

04468835 **Supplier Number:** 56914727 **(THIS IS THE FULLTEXT)**
Compressive bandages and pressure garments.
Medical Textiles , p NA
Nov , 1999
ISSN: 0266-2078
Language: English **Record Type:** Fulltext
Document Type: Newsletter ; Trade
Word Count: 937
Text:
Text:

Novel textile structures and the incorporation of elastomeric yarns have resulted in the development of medical products, such as compression bandages and pressure garments, where the longitudinal stretch in the material provides the radial forces required for different treatments.

For instance, hypertrophic scars are hard areas of skin caused by thermal or chemical burns where the skin is destroyed beyond a critical depth. They are unsightly, uncomfortable and, if untreated, can lead to scar contracture (areas of contracted skin over flexor joints that reduce the range of motion).

Functional and cosmetic disability from hypertrophic scarring can be significant, depending on the site and the extent of the damage. The effects are more serious for patients with darker skins as the scarring is often lighter in colour than even fairer skin tones.

Pressure garments have been the major treatment method for hypertrophic scars since the early 1970s. Indeed, pressure therapy has proved successful in controlling scarring in general as scars tend to be proud of the surrounding area of skin. The application of the pressure is achieved by the use of a garment made from elastic fabric. This can be a simple tube or a complete cut and sew garment.

Although never scientifically proven, it is believed that pressure therapy works by reducing the production of collagen within the developing or active scar. Pressure garments can also alleviate the pain or itchiness associated with hypertrophic scars and can prevent the development of serious contractures.

Addressing the recent **Medical Textiles '99 conference** held in Bolton, UK, Lisa McIntyre of Heriot-Watt University, quantified the comfort properties of 18 fabrics currently used in the treatment of hypertrophic scars. She said comfort includes the fabric's thermal properties, permeability to air and moisture vapour, ability to wick moisture, and surface roughness and friction. Her study considered the relationship between the comfort of a fabric and its construction and composition.

Poor compliance by patients requiring the long-term use of pressure garments often results from the poor physical appearance of the products and discomfort. In turn, discomfort can result from a poor **choice** of fabric or the **garment**'s construction.

Pressure garments must be worn for about 23.5 hours a day for at least nine months, and sometimes for more than two years, so it is essential they are comfortable to wear. However, McIntyre confirmed that most fabrics studied were too warm, thereby producing excess perspiration for the wearer, or were too rough. She added that most medical units still use sight, touch and experience to measure fit and efficacy.

Pressure garments are made either commercially or at the hospital. However, the traditional manufacturing method is subjective and relies heavily on the experience of the therapist to produce a garment for individual cases.

Research undertaken at De Montfort University, Leicester, UK, on the **design** of **pressure garments** for the treatment of hypertrophic scarring was also described at the conference. **The study, conducted by Brian Schofield** (now of the Hong Kong Polytechnic University), aimed to develop a more precise method of cutting pressure garments to give the required compression.

The method is based on the **principle** of the **Laplace Law** and **uses the relationship between measured skin-and-garment interface pressure, fabric tension and fabric curvature. A series of graphs was developed for predicting the correct measurements of pre-stretch pressure garments to assist therapists in the drafting and cutting of the garment.** A limited wearer-trial showed that the pressure garments constructed using the derived formula provided compression close to the predicted performance.

The formation of venous leg ulcers is caused by prolonged periods of immobility, paralysis or other venous disorders. The treatment of these ulcers places considerable financial demands on the health services of many countries.

Multi-layer compression bandages are arguably the most successful method for treating venous leg ulcers. By exerting a degree of external pressure on the limb, elasticized bandages increase the velocity of blood flow within the veins by providing support to the calf muscles.

However, high pressures are exerted over the relatively small radius of curvature of the tibia, which can lead to further complications, such as pressure-induced ulcers. Padding bandages are used beneath compression bandages to evenly distribute pressure on all points of a lower limb such as the tibia. (Ethicon of Somerville, New Jersey, USA, discloses an innovative multi-layer compression bandage system comprising an absorptive inner layer and an elastic outer layer in this issue of Medical Textiles.)

Speaking at the conference, Subhash Anand of Bolton Institute, UK, described a study to evaluate the pressure-distribution characteristics of four commercially available padding bandages. The pressure distribution of the padding bandages was determined using an existing technique (an Oxford Pressure Monitor) and one developed at Bolton Institute. A new test procedure, which measures the degree of pressure transference through the padding bandage structure, was also developed to determine the relationship between the bandage's structure and the pressure- distribution performance.

The results showed that the bandages had different pressure distribution characteristics and that this was greatly influenced by the type of padding bandage structure, said Anand. Further, an optimum padding bandage, called ASA, has been developed that claims to provide better pressure distribution than any of the fibre-based padding bandages currently available on the market.

Inga Lyashenko of the Technical University, Riga, Latvia, also outlined methods for calculating the local pressure of elastomer products, such as knee-length stockings, for treating venous ulcers. This could enable manufacturers of medical knitwear to make products with the required

pressure characteristics.
For further information, contact: Professor Subhash Anand, Faculty of Technology - Textiles, Bolton Institute, Deane Road, Bolton BL3 5AB, UK; tel: +44-1204-903549; fax: +44-1204-399074; E-mail: sca1@bolton.ac.uk

Subscription: $474.00 per year. Published monthly. PO Box 133, Whitney, Oxfordshire, England 0X8 6ZH., United Kingdom

Note: If you are interested, the Schofield paper discussed in the above article (*"The design of pressure garments for the treatment of hypertrophic scarring caused by burns"*) is included in Chapter 7, pages 55-62, of the following book, which you may request using this form:
http://uspto-a-pattr-2/siraapps/stic/npl/requests/main.cfm?service=ref_delivery

I have not been able to locate an electronically available version of the paper, or the conference proceedings.

Medical Textiles: Proceedings of the Second International Conference and Exhibition by S. C. Anand
Product Details
* Pub. Date: March 2001
* Publisher: CRC Press
* Format: Hardcover , 450pp
* ISBN-13: 9780849312267
* ISBN: 0849312264

Synopsis
The use of textile materials for medical and healthcare products ranges from simple gauze or bandage material to scaffolds for tissue culturing and a large variety of prostheses for permanent body implants. This edited collection provides up-to-date information on all aspects of this rapidly developing field.

31/9,K/1 (Item 1 from file: 15)
DIALOG(R)File 15: ABI/Inform(R)

00718283 93-67504
Medical clothing: A tutorial paper on pressure garments
Ng-Yip, Frency S F
International Journal of Clothing Science & Technology v5n1 pp: 17-24
1993
ISSN: 0955-6222 **Journal Code:** CST
Document Type: Journal article **Language:** English **Length:** 8 Pages
Special Feature: Diagrams References
Word Count: 4900

Abstract:
Pressure therapy is generally accepted as an effective means of preventing and controlling hypertrophic scarring after burn injury. Pressure treatment based principally on the use of pressure garments is widely used in Hong Kong and many other countries. These garments are tailor-made to the individual patient's measurement to provide a uniform and firm support

to body contours, and they are designed individually for the area of injury. The existing practice of the various kinds of pressure garments on patients is reviewed, and a better understanding of the present use of fabric and production methods employed in the manufacturing of the garments is provided. A brief account of the problems encountered by both the patients and the medical staff is also presented.

...

MADE-TO-MEASURE PRESSURE GARMENTS

In order to provide each individual patient with the correct continuous pressure over the scar area, regardless of size or shape, the pressure garments should be made to measure. They have the advantage of conforming precisely and comfortably to the contours of the patient's body, and hence provide maximum benefit.

The system of making the made-to-measure pressure garments in general use is operated in two ways: First, staff of the burn units of hospitals take individual patients' measurements, and produce pressure garments from elastomeric fabrics purchased from specialist fabric producers. Second, the staff within the burn units of hospitals take individual patients' measurements, and then order the custom-made pressure garments from specialist pressure garment manufacturers.

Most specialist pressure garment manufacturers, and the burn units of hospitals, purchase elastomeric fabrics from specialist fabric producers. Dependent on the characteristics of the fabric purchased, simple patterns are adjusted to allow for stretch in the garment, and very often, there is a small reduction (for example, 10 per cent), at the top and bottom of the garments to avoid discomfort or oedema. Special drafting equipment has also been designed by a commercial company to shorten measurements by between 5 per cent and 10 per cent, so as to give the required pressure for the garments while reading the measurement directly from the measuring charts. The **established** specialist **pressure** garment manufacturers have developed their own, standard engineering formulae to determine the size of the pattern and subsequently **create** a gradient **pressure** within the **garment**. Measurements for garments are made using a patented tape-measure, and accurate longitudinal and circumferential dimensions are gauged at short intervals (e.g. every one-and-a-half inches along the arms and legs). Garments are subsequently constructed from the individual patient measurements taken as per the physician's prescription. Fittings are provided to ensure comfort and problems concerned with itching are also assessed. Alteration service is provided by the commercial companies if the fitting is unsatisfactory.

Although commercial making-up services are available, some medical centres and hospitals favour the system of producing their own pressure garments in the occupational therapy department.

In Hong Kong, pressure garments are all made in the occupational therapy departments of the various hospitals. The procedure currently followed in Hong Kong for making and fitting pressure garments is similar to many hospitals in the UK, as follows:

* Fabric is cut according to a special pattern made to fit each patient, which has about 15 per cent taken off the circumference measurement so that

tension is induced in the garment. Zigzag stitch sewing machines are used for seaming the whole garment.

* Subjective assessment of tension is made when the garment is fitted on the patient, he or she being consulted about the comfort of the item. All patients are examined for progress in a clinic run jointly by the medical doctors and therapists in charge.

Fabric used to make pressure garments in Hong Kong is made from a synthetic, elastomeric yarn with Lycra; this is also used widely in the underwear manufacturing industry, and is relatively inexpensive.

Three types of fabrics having different strengths are purchased for the hospital each time, since patients in the differing phases of the healing process need pressure garments providing different levels of pressure. In general, children or patients with newly healed wounds will be offered the garments made of the softest and most comfortable material, while the stronger material will be used on adults, who require higher compression for their treatment.
However, each hospital has its own operating system, and many hospitals in the UK making the pressure garments use only one kind of Lycra fabric each time. Different degrees of compression produced by the pressure garments for different groups of patients can be achieved by adjustment of the pattern size and the fitting of pressure garments...

... The existing pressure garments are found to be undesirable because: many hospitals cut their own pressure garments using approximations of percentage reduction of pattern dimensions; adjustments of garment sizes are achieved by fitting garments on patients using subjective criteria. The existing method of pattern construction needs to be improved in order to achieve more effective and correct pressure. For different parts of the body with differing radii of curvature, variations in the percentage to be deducted from the body measurements must be carefully calculated according to the different fabric elastic characteristics...

3/3,K/3 (Item 3 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0007298073 *Drawing available*
WPI Acc no: 1995-358708/199546
Related WPI Acc No: 1994-349596; 1997-424422
XRPX Acc No: N1995-266521
Automatic foot analysis appts. for posture analysis, shoe design, foot dimension database - has structure with two foot wells having pressure contacts, infrared LEDs and phototransistors feeding microprocessor for foot dimension display
Patent Assignee: FOOTMARK INC (FOOT-N)
Inventor: BROWN A C; DABBS J M; WELTY C T; WELTY C W; WILLIAMS D M; WILLIAMS H G

Patent Family (4 patents, 61 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
WO 1995027185	A1	19951012	WO 1995US3272	A	19950315	199546	B
AU 199521208	A	19951023	AU 199521208	A	19950315	199605	E

US 5790256	A	19980804	US 1992903017	A	19920623	199838	E
			US 1994221707	A	19940401		
			US 1996718205	A	19960920		
			US 1997792407	A	19970203		
US 6331893	B1	20011218	US 1992903017	A	19920623	200205	E
			US 1994221707	A	19940401		
			US 1996718205	A	19960920		
			US 1997792407	A	19970203		
			US 1998128368	A	19980803		
			US 2001760676	A	20010116		

Priority Applications (no., kind, date): US 1992903017 A 19920623; US 1994221707 A 19940401; US 1996718205 A 19960920; US 1997792407 A 19970203; US 1998128368 A 19980803; US 2001760676 A 20010116

Original Abstracts:pressure sensor matrixes. A digital signal processor normalizes and smoothes the pressure data for display on the monitor. Infrared LED's and phototransistors are located **around** the perimeter of each **foot** well and are **utilized** to measure the **length**, **width**, and heights **of a foot**. A microprocessor addresses **each** LED and phototransistor separately. The controller reads data created by the DSP and IR microprocessor, calculates additional data, and displays the resulting data on the monitor. According to one method, the pressure sensors and optical **sensors** are utilized to **determine**, among others, **foot length**, **foot width**, **shoe size**, **foot volume**, **foot shape**, **force** distribution, **pronation**, **arch** type, and recommended last type. In other methods, the DSP and IR microprocessors provide data which enable the controller to perform calculations and comparisons to... ..

According to **one method**,the digital signal processor (**230**) and microprocessor (244) provide data enabling the controller (200) to determine and display recommended orthotic prescriptions or insole **selection** information, as well as **center** of **pressure** and **postural** sway information which are useful in diagnosing and treating certain medical problems. ...C

.**Claims:**zone to quantify the amount of force applied to individual pressure sensors by different portions of a patient's foot;receiving a patient's lower **leg** within the **measurement** zone and the **foot associated** with the **lower leg** in at **least** indirect contact with the plurality of pressure sensors;operating the plurality of optical sensors at a first time to generate a first set of optical data corresponding to a position of the lower **leg** received within the **measurement** zone;operating the plurality of **pressure** sensors at the **same** first time to generate a first set of force measurements corresponding to the portion of the patient's weight supported by different portions of the patient's foot and different pressure sensors beneath the different portions of the patient's foot;**computing from** the first set of optical data a first **position of** the patient's lower **leg** relative to the foot associated with the **patient**'s lower **leg**;computing from **the** first set of **force measurements** a first plurality of centers of **pressure**, each **center** of **pressure** being associated with a different portion of the patient's **foot**;instructing the patient **on** a video display to perform a physical action;operating the plurality of optical sensors at a second time after performance of the physical action to generate a second set of optical data corresponding to a second **position** of the lower **leg** received within the **measurement** zone;operating the plurality of pressure sensors at the same second **time** to generate a **second** set of force **measurements** corresponding to the portion of the patient's weight supported by different portions of the patient's **foot** and different pressure **sensors** beneath the different portions of the patient's foot;computing from the second set of optical data **a** second **position** of the patient's lower **leg** relative to the foot associated with the patient's lower leg;computing from the second set of **force measurements** a second plurality of **centers** of pressure, each center of pressure being associated with a different portion of the patient's **foot**;analyzing similarities and **differences** in the first and second **positions** of the patient's lower **leg** and

in the first and second pluralities of centers of **pressure** to **determine** a test result; and,presenting the test result **via** the video display to the **patient**.... ... for receipt of a foot and a base portion of a leg attached to the foot;operating the plurality of optical sensors to locate a **position** of a **foot** substantially randomly located within the sensing area;generating optical data representing the position **of** the **foot**;generating optical data representing **the position** of the **base** portion of a leg attached to the **foot**;determining, based upon **the** optical data **representing** the **position** of the **foot** and the optical data representing the position of the **base** portion of **the leg** attached to the **foot**, information associated **with** the **position** of the base portion **of** the **leg** attached **to** the **foot** relative to the **position** of the **foot**; and,**outputting** the determined **information.>**

44/3,K/6 (Item 6 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0014471484 *Drawing available*
WPI Acc no: 2004-662949/200465
XRPX Acc No: N2004-524834
Low-cost optical detection of shape of body or body parts, e.g. for medical use, by covering body with tight elastic covering having high-contrast marks, and imaging using sensor on circular path
Patent Assignee: CORPUS.E AG (CORP-N); RUTSCHMANN D (RUTS-I)
Inventor: RUTSCHMANN D

Patent Family (7 patents, 107 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
DE 10309788	A1	20040916	DE 10309788	A	20030305	200465	B
WO 2004078040	A1	20040916	WO 2004EP2136	A	20040303	200465	E
EP 1599136	A1	20051130	EP 2004716562	A	20040303	200578	E
			WO 2004EP2136	A	20040303		
US 20060140463	A1	20060629	WO 2004EP2136	A	20040303	200643	E
			US 2005546704	A	20050822		
US 7433502	B2	20081007	WO 2004EP2136	A	20040303	200867	E
			US 2005546704	A	20050822		
EP 1599136	B1	20101006	EP 2004716562	A	20040303	201065	E
			WO 2004EP2136	A	20040303		
DE 502004011736	G	20101118	DE 502004011736	A	20040303	201076	E
			EP 2004716562	A	20040303		
			WO 2004EP2136	A	20040303		

Priority Applications (no., kind, date): DE 10309788 A 20030305
.**Original Abstracts:**taken from different angles. At least one camera (22) is moved around the body using a simple, inexact guide. Overlapping photographs are taken from different **positions** in **space**, whereby these photographs capture both the body and a plurality of marks (10) on the support (12). Methods of photogrammetry and digitized image processing and pattern recognition supply exact **space coordinates** of the body to be digitized. An example of the use of the invention is the digitization of the foot/lower leg area for the selection or customization of anatomically fitting footwear, the digitization of the leg area for the manufacture or **selection** of fitting **compression stockings**. ... ...

Claims:A method for three-dimensional, digitized sensing of the spatial **shape** of **bodies** or **body parts**, comprising the steps of covering the body, body part or body parts (26) to be digitized with an elastic, tight-fitting cover (14) including high... ... parts (26) onto a support (12) which is provided with marks (10) that are also photogrammetrically analysable, moving at least one imaging sensor (22) mechanically **around** the **body**, **body part** or **body parts on** a fixed path in **space**, taking, in successive shooting **positions** (28) whose **image** cutouts overlap each other, at least one respective image which covers both the body, body part or body parts and, simultaneously, a plurality of the... ... 12) that are photogrammetrically analysable, and analysing these image shots by methods of photogrammetry and digital image processing and pattern recognition such that the precise **space coordinates** of the **body**, **body part** or **body parts** photographed are determined, the photogrammetric analysis of the overlapping shots including back-calculating the **position** in **space** of the individual shooting **positions** of the imaging sensor (22) based on the marks of the support and the marks of the elastic cover.. The invention claimed is: 1. A method for three-dimensional, digitized sensing of the **spatial** shape **of** bodies **or body** parts, comprising the steps of: covering the body, the body part or the body parts to be digitized with an elastic, tight-fitting cover which... ... body part or the body parts onto a support which is also provided with marks that are photogrammetrically analyzable, mechanically moving at least one imaging **sensor** around **the** body, **the body** part or **the body parts** on a fixed path **in** space, **taking** image shots of **the body**, **body** part **or body** parts in successive **shooting** positions, **whose** image cutouts partially overlap each other, at least one said image is taken which covers both the body, the body part or the body parts... ... the support and the marks on the tight-fitting cover by methods of photogrammetry and digital image processing and pattern recognition, such that the precise **shooting** positions **in** space of the imaging sensor and the **precise space** coordinates of the **photographed** body, **the body** part or **the body** parts are determined.

36/3K/5 (Item 1 from file: 349)
DIALOG(R)File 349: PCT FULLTEXT

00456988
BANDAGE
BANDAGE
Patent Applicant/Patent Assignee:

- **SMITH & NEPHEW PLC**
- **SIVSHANKAR Selvarajah**

Inventor(s):

- **SIVSHANKAR Selvarajah**

	Country	Number	Kind	Date
Patent	WO	9847452	A1	19981029
Application	WO	98GB1159		19980421
Priorities	GB	978078		19970422

Detailed Description:
...These include marking compression bandages with rectangles which on reaching the desired extension are viewed as squares.

Compression bandages are normally specified according to the **Laplace equation**;
P = 471nFs
WC

where P = pressure (mmHg)
n =number of layers
F = force in bandage (N)
s = stress relaxation factor
W = bandage width (cm)
c... ...ankle and 18mmHg at the c alf.

Therefore the present invention seeks to avoid the disadvantages of the prior art where the amount of graduated **compression** provided is **determined** by, inter alia, the **shape** of the **limb**, as currently **compression bandages** are **designed** to be applied with a constant force by the provision of markings that reach a particular identifiable configuration when the bandage has been stretched to...

39/3K/6 (Item 1 from file: 349)
DIALOG(R)File 349: PCT FULLTEXT

01116279
DIRECT MANUAL EXAMINATION OF REMOTE PATIENT WITH VIRTUAL EXAMINATION FUNCTIONALITY
AUSCULTATION MANUELLE DIRECTE A DISTANCE A FONCTIONNALITES VIRTUELLES, D'UN PATIENT
Patent Applicant/Patent Assignee:

- **CEL-KOM LLC**
  5708 - 145th Avenue Southeast, Bellevue, WA 98006; US; US(Residence); US(Nationality); (For all designated states except: US)

Patent Applicant/Inventor:

- **OMBRELLARO Mark P**
  Suite 220, 1135 - 116th Avenue N.E., Bellevue, WA 98004; US; US(Residence); US(Nationality); (Designated only for: US)

Legal Representative:

- **DODGE Ryan E Jr (agent)**
  Christensen O'Connor Johnson & Kindness PLLC, Suite 2800, 1420 Fifth Avenue, Seattle, WA 98101; US

	Country	Number	Kind	Date
Patent	WO	200437084	A1	20040506
Application	WO	2003US2660		20030127
Priorities	US	2002274569		20021018

Claims:
...the stored digital data file 622 which PEM unit was used with the HCU. Next, the software will establish a graphic representation of the examined **body part** (based **on** the specific regional PEM used) and sequentially replay the digital data stored within the digital data file 622. The input pressure value, pressure over time...

...translated with respect to the parameters described above. Since each PEM unit is composed of a series of smaller subunits, a grid pattern is already **established** over which the **force** and pressure data may be mapped. The series of forces applied to the HCU and PEM reaction response will then be mapped along the specific... ...multi-channel pressure transducer or resistors within each cell are suitable for use in the present invention. In such a configuration, the absolute change in **pressure** or resistance is **determined** by taking the aggregate of forces applied by the single or multiple, multichannel pressure transducer or resistors. Referring to FIGURE I 1, the body-form... ...the data to input signals for driving a plurality of variable pressure producing devices housed in an array of cells 808 disposed in the interactive **pressure** playback **garment** 806. The **pressure** producing devices are **selectively** actuated to apply a desired force or tactile sensation upon the user donning the interactive pressure playback garment 806. The pressure producing devices are described... ...bottom working surface 912 has a slight depression or concavity with respect to the periphery of the PEIM 904. The slight rise in the top **surface** 910 allows the patient to **place** their hand on the top of the PEIM 904 and hold it in place or move it along portions of their body as directed by...

II. Inventor Search Results from Dialog

46/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0014472223 *Drawing available*
WPI Acc no: 2004-663731/200465
XRPX Acc No: N2004-525522
Restraining orthosis selection assisting device, has computer determining values of restraining pressure to be exerted by orthosis on person from two data files established by installation and strain gauge
Patent Assignee: INNOTHERAPIE LAB SA (INNO-N); LAB INNOTHERA (INNO-N); LAB INNOTHERA SA (INNO-N); LAB INNOTHERA SAS (INNO-N); BASSEZ S (BASS-I); TESTUD J (TEST-I)
Inventor: **BASSEZ S**; **TESTUD J**; **TESTUD J L**

Patent Family (11 patents, 107 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
FR 2852421	A1	20040917	FR 20034931	A	20030422	200465	B
WO 2004095342	A2	20041104	WO 2004FR976	A	20040421	200472	E
EP 1616281	A2	20060118	EP 2004742553	A	20040421	200606	E
			WO 2004FR976	A	20040421		
BR 200409665	A	20060418	BR 20049665	A	20040421	200628	E
			WO 2004FR976	A	20040421		
AU 2004232820	A1	20041104	AU 2004232820	A	20040421	200637	E
KR 2006012274	A	20060207	WO 2004FR976	A	20040421	200660	E
			KR 2005720137	A	20051022		
CN 1791876	A	20060621	CN 200480014005	A	20040421	200674	E
US 20070055537	A1	20070308	WO 2004FR976	A	20040421	200720	E
			US 2006553877	A	20060905		
JP 2007526949	W	20070920	WO 2004FR976	A	20040421	200763	E
			JP 2006505805	A	20040421		
AU 2004232820	B2	20090924	AU 2004232820	A	20040421	200965	E
CN 100489873	C	20090520	CN 200480014005	A	20040421	200970	E

Priority Applications (no., kind, date): FR 20034931 A 20030422

46/3,K/2 (Item 2 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0009158689 *Drawing available*
WPI Acc no: 1999-081016/199907
XRPX Acc No: N1999-058238
Simultaneous mapping device for susceptible pressures applied by pressure thumb to part of body - has sensors which measure pressure applied on form surface using thin wall and measuring change in curvature.

Patent Assignee: INNOTHERA TOPIC INT (INNO); INNOTHERA TOPIC INT SA (INNO)
Inventor: OUCHENE A; PRUDHOMME J; PRUDHOMME J P; SENNOUNE M; **TESTUD J**; **TESTUD J L**

Patent Family (9 patents, 23 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 1998058605	A1	19981230	WO 1998FR1322	A	19980623	199907	B
FR 2764796	A1	19981224	FR 19977787	A	19970623	199907	E
EP 993283	A1	20000419	EP 1998933694	A	19980623	200024	E
			WO 1998FR1322	A	19980623		
US 6334363	B1	20020101	WO 1998FR1322	A	19980623	200207	E
			US 2000446709	A	20000525		
JP 2002510391	W	20020402	WO 1998FR1322	A	19980623	200225	E
			JP 1999503911	A	19980623		
EP 993283	B1	20041208	EP 1998933694	A	19980623	200480	E
			WO 1998FR1322	A	19980623		
DE 69828053	E	20050113	DE 69828053	A	19980623	200506	E
			EP 1998933694	A	19980623		
			WO 1998FR1322	A	19980623		
ES 2235342	T3	20050701	EP 1998933694	A	19980623	200545	E
DE 69828053	T2	20060413	DE 69828053	A	19980623	200626	E
			EP 1998933694	A	19980623		
			WO 1998FR1322	A	19980623		

Priority Applications (no., kind, date): FR 19977787 A 19970623

28/3,K/1 (Item 1 from file: 5)
DIALOG(R)File 5: Biosis Previews(R)

19095130 **Biosis No.:** 200600440525
Human muscle fatigue and elastic compressive stockings
Author: Maton B; Thiney G (Reprint); Dang S; Tra S; **Bassez S**; Wicart P; Ouchene A
Author Address: Labs INNOTHERA, Serv Biophys, 7-9 Ave Francois Vincent Raspail, F-94110 Arcueil, France**France
Author E-mail Address: gregory.thiney@INNOTHERA.com
Journal: European Journal of Applied Physiology 97 (4): p 432-442 JUL 2006 2006
ISSN: 1439-6319
Document Type: Article
Record Type: Abstract
Language: English
Human muscle fatigue and elastic compressive stockings

Author: ...**Bassez S**

Abstract: The present study was performed to test if elastic **compressive stockings** (ECSs) increase muscle

fatigability during sustained muscle contraction or if it improves the recovery after fatigue. Surface electromyograms (EMGs) were recorded on 4 leg and...
DESCRIPTORS:
Miscellaneous Terms: Concept Codes: ...elastic **compressive stocking**;

Dialog eLink: USPTO Full Text Retrieval Options
28/3,K/2 (Item 2 from file: 5)
DIALOG(R)File 5: Biosis Previews(R)

16542452 **Biosis No.:** 200200135963
Device for measuring pressure points to be applied by a compressive orthotic device
Author: Testud Jean-Louis (Reprint); Sennoune Mohammed; Prudhomme Jean-Pierre; Ouchene Amina
Author Address: Paris, France**France
Journal: Official Gazette of the United States Patent and Trademark Office Patents 1254 (1): Jan. 1, 2002 2002
Medium: e-file
Patent Number: US 6334363 **Patent Date Granted:** January 01, 2002 20020101 **Patent Classification:** 73-86204 **Patent Assignee:** Innothera Topic International, Arcueil, France **Patent Country:** USA
ISSN: 0098-1133
Document Type: Patent
Record Type: Abstract
Language: English
Device for measuring pressure points to be applied by a compressive orthotic device

Author: Testud Jean-Louis...

Abstract: The device comprises a rigid former reproducing the volume of a portion of the body and suitable for receiving the **compressive orthosis**. The former (10) incorporates a plurality of sensors (22) distributed over various points of the former and configured in such a manner as to avoid... ...Advantageously, at the location of the measurement point, each sensor comprises a thin wall capable of being subjected to microdeformation under the effect of the **pressure** applied by the **orthosis**, and means such as a strain gauge bridge, for example. The thin wall can constitute a portion of a support pellet which is fitted to...
DESCRIPTORS:
Methods & Equipment: compressive orthotic device...
Geographical Name:

Dialog eLink: USPTO Full Text Retrieval Options
28/3,K/3 (Item 1 from file: 73)
DIALOG(R)File 73: EMBASE

0084365072 **EMBASE/MEDLINE No:** 2010679232
Comparative in vitro study of three interface pressure sensors used to evaluate medical compression hosiery

Flaud P.; **Bassez S.**; Counord J.-L.
Laboratoire MSC UMR CNRS 7057, Universite PARIS VII, France
Author email: sophie.bassez@innothera.com
Corresp. Author/Affil: Bassez S.: Laboratoires INNOTHERA, Service de Biophysique, 22 avenue Aristide

Briand, 94110 Arcueil, France
Corresp. Author Email: sophie.bassez@innothera.com

Dermatologic Surgery (Dermatol. Surg.) (United Kingdom) December 1, 2010 , 36/12 (1930-1940)
CODEN: DESUF **ISSN:** 1076-0512 **eISSN:** 1524-4725
Item Identifier (DOI): 10.1111/j.1524-4725.2010.01767.x
Document Type: Journal ; Article **Record Type:** Abstract
Language: English **Summary language:** English
Number of References: 38
Comparative in vitro study of three interface pressure sensors used to evaluate medical compression hosiery

...**Bassez S**
Corresp. Author/Affil: Bassez S.: Laboratoires INNOTHERA, Service de Biophysique, 22 avenue Aristide Briand, 94110 Arcueil...
Corresp. Author Email:

Background Compressive treatment is recognized as therapy to prevent and treat chronic venous insufficiency. Measurement of the **pressure** exerted by **compression hosiery** is important within the context of clinical trials. Different pressure sensors are available, with different performance. Objective This study is a metrological characterization of three... ...surface. METHOD The measuring devices were first tested in a pressurized chamber and then compared by placing the probes on a wooden leg model using **compression stockings** of known **pressure**. Results In a pressurized chamber, the three systems gave linear responses and an overall error of 15.4%, 3.1%, and 4.3% for Salzmann...
Medical Descriptors:
*
accuracy; article; chronic vein insufficiency--therapy--th; **compression garment**; **compression** therapy; controlled study; device; human; in vitro study; intermethod comparison; priority journal
Orig. Descriptors:
Medical Terms (Uncontrolled): compression hosiery; kikuhime sensor; salzmann sensor; talley sensor
Orig. Terms (Uncontrolled):

28/3,K/4 (Item 2 from file: 73)
DIALOG(R)File 73: EMBASE

0081242612 **EMBASE/MEDLINE No:** 2006304870
Human muscle fatigue and elastic compressive stockings

Maton B.; Thiney G.; Dang S.; Tra S.; **Bassez S.**; Wicart P.; Ouchene A.
Laboratoires INNOTHERA, Service de Biophysique, 7-9 Avenue Francois Vincent Raspail, 94110 Arcueil, France
Author email: gregory.thiney@INNOTHERA.com
Corresp. Author/Affil: Thiney G.: Laboratoires INNOTHERA, Service de Biophysique, 7-9 Avenue Francois Vincent Raspail, 94110 Arcueil, France
Corresp. Author Email: gregory.thiney@INNOTHERA.com

European Journal of Applied Physiology (Eur. J. Appl. Physiol.) (Germany) July 1, 2006 , 97/4 (432-442)

CODEN: EJAPF **ISSN:** 1439-6319
Item Identifier (DOI): 10.1007/s00421-006-0187-8
Document Type: Journal ; Article **Record Type:** Abstract
Language: English **Summary language:** English
Number of References: 52
Human muscle fatigue and elastic compressive stockings

...**Bassez S**

The present study was performed to test if elastic **compressive stockings** (ECSs) increase muscle fatigability during sustained muscle contraction or if it improves the recovery after fatigue. Surface electromyograms (EMGs) were recorded on 4 leg and...

Dialog eLink: USPTO Full Text Retrieval Options
28/3,K/5 (Item 1 from file: 155)
DIALOG(R)File 155: MEDLINE(R)

35401929 **PMID:** 21126279
Comparative in vitro study of three interface pressure sensors used to evaluate medical compression hosiery.

Flaud Patrice; **Bassez Sophie**; Counord Jean-Louis
Laboratoire MSC UMR CNRS 7057 Universite PARIS VII, France Laboratoires Innothera, Service de Biophysique, Arcueil, France.
Dermatologic surgery - official publication for American Society for Dermatologic Surgery et al. (United States) Dec 2010 , 36 (12) p1930-40 , **ISSN:** 1524-4725--Electronic 1076-0512--Linking **Journal Code:** 9504371
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: In Data Review
Comparative in vitro study of three interface pressure sensors used to evaluate medical compression hosiery.

Flaud Patrice; **Bassez Sophie**; Counord Jean-Louis
BACKGROUND Compressive treatment is recognized as therapy to prevent and treat chronic venous insufficiency. Measurement of the **pressure** exerted by **compression hosiery** is important within the context of clinical trials. Different pressure sensors are available, with different performance. OBJECTIVE This study is a metrological characterization of three... ...surface. METHOD The measuring devices were first tested in a pressurized chamber and then compared by placing the probes on a wooden leg model using **compression stockings** of known **pressure**. RESULTS In a pressurized chamber, the three systems gave linear responses and an overall error of 15.4%, 3.1%, and 4.3% for Salzmann... (

Dialog eLink: USPTO Full Text Retrieval Options
28/3,K/6 (Item 2 from file: 155)
DIALOG(R)File 155: MEDLINE(R)

17301615 **PMID:** 16685551
Human muscle fatigue and elastic compressive stockings.

Maton B; Thiney G; Dang S; Tra S; **Bassez S**; Wicart P; Ouchene A
Laboratoires INNOTHERA Service de Biophysique, 7-9 Avenue Francois Vincent Raspail, 94110 Arcueil, France.
European journal of applied physiology (Germany) Jul 2006 , 97 (4) p432-42 , **ISSN:** 1439-6319--Print 1439-6319--Linking **Journal Code:** 100954790
Publishing Model Print-Electronic
Document type: Clinical Trial; Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
Human muscle fatigue and elastic compressive stockings.

Maton B; Thiney G; Dang S; Tra S; **Bassez S**; Wicart P; Ouchene A
The present study was performed to test if elastic **compressive stockings** (ECSs) increase muscle fatigability during sustained muscle contraction or if it improves the recovery after fatigue. Surface electromyograms (EMGs) were recorded on 4 leg and... (

Dialog eLink: USPTO Full Text Retrieval Options
28/3,K/7 (Item 1 from file: 34)
DIALOG(R)File 34: SciSearch(R) Cited Ref Sci

21445416 **Genuine Article#:** 688YF **No. References:** 38
Title: Comparative In Vitro Study of Three Interface Pressure Sensors Used to Evaluate Medical Compression Hosiery
Author: Flaud P; **Bassez S (REPRINT)** ; Counord JL
Author Email Address: sophie.bassez@innothera.com
Corporate Source: Labs INNOTHERA,Serv Biophys,22 Ave Aristide Briand/F-94110 Arcueil//France/ (REPRINT); Labs INNOTHERA,Serv Biophys,F-94110 Arcueil//France/; Univ Paris 07,Lab MSC, CNRS, UMR 7057,F-75221 Paris 05//France/
Journal: DERMATOLOGIC SURGERY , 2010 , V 36 , N12 (DEC) , P 1930-1940
ISSN: 1076-0512 **Publication Date:** 20101200
Digital Object Identifier: 10.1111/j.1524-4725.2010.01767.x
Publisher: WILEY-BLACKWELL PUBLISHING, INC , COMMERCE PLACE, 350 MAIN ST, MALDEN 02148, MA USA
Funding: Funding for this study was provided by Innothera.
Funding Organization -- Grant Number:
Innothera
Language: English **Document Type:** ARTICLE (ABSTRACT AVAILABLE)
Title: Comparative In Vitro Study of Three Interface Pressure Sensors Used to Evaluate Medical Compression Hosiery
Author: Flaud P; **Bassez S (REPRINT)** ; Counord JL
Abstract: BACKGROUND

Compressive treatment is recognized as therapy to prevent and treat chronic venous insufficiency. Measurement of the **pressure** exerted by **compression hosiery** is important within the context of clinical trials. Different pressure sensors are available, with different performance.

OBJECTIVE

This study is a metrological characterization of three... ...surface.

METHOD

The measuring devices were first tested in a pressurized chamber and then compared by placing the probes on a wooden leg model using **compression stockings** of known **pressure**.

RESULTS

In a pressurized chamber, the three systems gave linear responses and an overall error of 15.4%, 3.1%, and 4.3% for Salzmann...
Descriptors:

Dialog eLink: USPTO Full Text Retrieval Options
28/3,K/8 (Item 2 from file: 34)
DIALOG(R)File 34: SciSearch(R) Cited Ref Sci

15314967 **Genuine Article#:** 058MF **No. References:** 52
Title: Human muscle fatigue and elastic compressive stockings
Author: Maton B; Thiney G (REPRINT) ; Dang S; Tra S; **Bassez S**; Wicart P; Ouchene A
Author Email Address: gregory.thiney@INNOTHERA.com
Corporate Source: Labs INNOTHERA,Serv Biophys,7-9 Ave Francois Vincent Raspail/F-94110 Arcueil//France/ (REPRINT); Labs INNOTHERA,Serv Biophys,F-94110 Arcueil//France/; Grp Hosp Cochin,Serv Physiol & Explorat Fonctionnelle,Paris//France/; Grp Hosp Cochin St Vincent de Paul La Roche Guyon,Serv Chirurg Pediat,Paris//France/
Journal: EUROPEAN JOURNAL OF APPLIED PHYSIOLOGY , 2006 , V 97 , N4 (JUL) , P 432-442
ISSN: 1439-6319 **Publication Date:** 20060700
Publisher: SPRINGER , 233 SPRING STREET, NEW YORK, NY 10013 USA
Language: English **Document Type:** ARTICLE (ABSTRACT AVAILABLE)
Title: Human muscle fatigue and elastic compressive stockings
Author: Maton B; Thiney G (REPRINT) ; Dang S; Tra S; **Bassez S**; Wicart P; Ouchene A
Abstract: The present study was performed to test if elastic **compressive stockings** (ECSs) increase muscle fatigability during sustained muscle contraction or if it improves the recovery after fatigue. Surface electromyograms (EMGs) were recorded on 4 leg and...
Descriptors: ...fatigue ; **compressive stockings** ; force recovery ; EMG spectra

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Dialog eLink: USPTO Full Text Retrieval Options
28/3,K/9 (Item 3 from file: 34)
DIALOG(R)File 34: SciSearch(R) Cited Ref Sci

15246542 **Genuine Article#:** 051GV **No. References:** 30
Title: Area-pressure relationship of lower limb main veins in man
Author: Chauveau M; **Bassez S**; Tra S; Scherrer B (REPRINT)
Author Email Address: sophie.bassez@innothera.com
Corporate Source: Labs Innothera,Labs Innothera Biophys,7-9 Av Francois Vincent Raspail/F-94110 Arcueil//France/ (REPRINT); Labs Innothera,Labs Innothera Biophys,F-94110 Arcueil//France/; Cochin Hosp,Dept Physiol,Paris//France/; Theriamis,St Maur des Fosses//France/
Journal: VASA-JOURNAL OF VASCULAR DISEASES , 2006 , V 35 , N2 (MAY) , P 59-66
ISSN: 0301-1526 **Publication Date:** 20060500
Publisher: VERLAG HANS HUBER , LANGGASS-STRASSE 76, CH-3000 BERN 9, SWITZERLAND
Language: English **Document Type:** ARTICLE (ABSTRACT AVAILABLE)
Author: Chauveau M; **Bassez S**; Tra S; Scherrer B (REPRINT)
Identifiers: ...GRADUATED **COMPRESSION STOCKINGS**; VENOUS HEMODYNAMICS; THIGH **COMPRESSION**; THROMBOSIS; CALF; PREVENTION; VOLUME; STASIS; REFLUX; MODEL
Research Fronts:

III. Text Search Results from Dialog

A. Patent Files, Abstract

```
  File 347:JAPIO Dec 1976-2009/May(Updated 090903)
         (c) 2009 JPO & JAPIO
  File 350:Derwent WPIX 1963-2009/UD=200956
         (c) 2009 Thomson Reuters

Set     Items   Description
S1      42200   (ORTHOSIS OR ORTHOSES OR ORTHESIS OR ORTHESES OR ORTHOTIC?
             ? OR BRACE OR BRACES OR BANDAG? OR SOCK? ? OR STOCKING? ? OR -
             PANTYHOSE OR HOSIERY OR SLEEVE OR SLEEVES OR GARMENT? ? OR TI-
             GHTS OR HOSE OR BOOT OR BOOTS)(4N)(COMPRESS? OR CONSTRICT? OR
             PRESSUR? OR TENSION OR ORTHOPAEDIC OR ORTHOPEDIC OR THERAPEUT-
             IC)
S2       2441   (TUBULAR? OR TUBE OR TUBED OR TUBES OR TUBIFORM? OR TUBELI-
             KE OR CYLINDRIC?)(4N)S1
S3       3409   (ELASTIC? OR RESILIENT? OR FLEXILE OR FLEXIBL? OR STRETCHA-
             BLE OR TENSILE OR STRETCHY)(4N)S1
S4    1408961   (LIMB OR LIMBS OR LEG OR LEGS OR ARM OR ARMS OR THIGH? ? OR
              CALF OR (BODY OR BODILY OR BODIES)(2N)PART? ? OR ANKLE OR AN-
             KLES OR WRIST OR WRISTS OR KNEE OR KNEES OR BODYPART? ? OR AP-
             PENDAGE OR APPENDAGES OR EXTREMITY OR EXTREMITIES OR FEET OR -
             FOOT)
S5     183438   (SHAPE OR SHAPED OR SHAPES OR MORPHOLOG? OR FORM OR STRUCT-
             URE OR CURVATURE? ? OR DIMENSION? ? OR CONTOUR? ? OR SIZE OR -
             SIZES OR SIZING OR MEASUREMENT? ? OR LENGTH OR WIDTH) (4N)S4
S6     847053   (POINT? ? OR COORDINATE? ? OR SITES OR SITE OR SPOT OR SPO-
             TS OR PLACE? ? OR POSITION? ?)(5N)(AXIS OR AXES OR SURFACE OR
             SURFACES OR GRAPH? OR IMAGE OR SPACE OR SPACES OR S4)
S7      11224   (3D OR (THREE OR MULTI OR MULTIPLE)()DIMENSION? OR MULTIDI-
             MENSIONAL OR STEREOSCOP?)(4N)S6
S8     419060   (SURFACE OR SURFACES OR ALONG OR ON OR SKIN OR EXTERIOR OR
             FACE OR FACES OR OUTSIDE OR AROUND OR SURROUNDING OR OVERLAID
             OR OVERLAY? OR OVERLYING)(4N)S4
S9     145360   (CALCULAT? OR DETERMIN? OR COMPUTE OR COMPUTES OR COMPUTED
             OR COMPUTING OR COMPUTATION OR ESTABLISH? OR ASSESS? OR DERIV?
              OR OBTAIN?)(3N)(COMPRESSION? ? OR TENSION? ? OR PRESSURE? ? -
             OR FORCE OR FORCES)
S10     10133   (LAPLACE?? OR LA()PLACE??)
S11       847   (SELECT? OR CHOOSE OR CHOSEN OR CHOOSING OR PICK? OR IDENT-
             IFY? OR DESIGN? OR CHOICE? ? OR DECIDE? ? OR DECIDING OR FIND?
              OR CREAT? OR CUSTOMIZ? OR CUSTOMIS? OR PERSONALIZ? OR PERSON-
             ALIS? OR INDIVIDUALIZ? OR INDIVIDUALIZ?)(4N)S1
S12       324   S2 AND S3
S13        13   S12 AND S5
S14         0   S13 AND S7
S15         5   S13 AND S6
S16         0   S13 AND S9
S17         9   S13 AND S8
S18         0   S17 AND S10
S19         0   S13 AND S10
S20         0   S11 AND S10
S21        50   S1 AND S10
S22         2   S21 AND S9
S23         5   S21 AND S5
S24        10   S21 AND (S2 OR S3)
S25         0   S21 AND S7
S26         0   S12 AND S10
S27        80   S5 AND S7 AND S8
S28         1   S27 AND S11
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S29          2   S27 AND S1
S30         25   (S15 OR S17 OR S22 OR S23 OR S24 OR S28 OR S29)
S31         15   S30 AND PY=1963:2003
S32         13   S30 AND AY=1963:2003 AND AC=US
S33         19   S31 OR S32
S34        302   S10(3N)(LAW OR LAWS OR RULE OR RULES OR EQUATION? ? OR FOR-
                 MULA? ? OR ALGORITHM? ? OR FUNCTION? ? OR CALCULATION? ? OR P-
                 RINCIPLE? ?)
S35          0   S11 AND S34
S36          0   S1 AND S9 AND S34
S37          1   S1 AND S34
S38          1   S11 AND S7 AND S8
S39         62   S11 AND S5
S40         26   S39 AND S6
S41         22   S40 AND S8
S42          5   S41 AND S9
S43          4   (S38 OR S42) NOT (S37 OR S33)
S44         17   S41 NOT (S37 OR S33 OR S43)
S45         10   AU=((BASSEZ, S? OR BASSEZ S? OR BASSEZ(2N)S?) OR (TESTUD, -
                 J? OR TESTUD J? OR TESTUD(2N)J?))
S46          2   S45 AND S1
```

33/3,K/2 (Item 2 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0015055440 *Drawing available*
WPI Acc no: 2005-403464/200541
XRAM Acc no: C2005-124712
XRPX Acc No: N2005-327219
Compression garment for compressing portion of body of patient when treating lymph edema and other forms of edema, comprises pressure projections extending from backing toward channel, and layer of compressible cushioning material
Patent Assignee: ZORN INC JULIUS (ZORN-N)
Inventor: SCOTT E R; ZORN A

Patent Family (3 patents, 106 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20050113729	A1	20050526	US 2003719407	A	20031121	200541	B
WO 2005052294	A1	20050609	WO 2004US34820	A	20041020	200541	E
US 7135007	B2	20061114	US 2003719407	A	20031121	200675	E

Priority Applications (no., kind, date): US 2003719407 A 20031121
Alerting Abstract ... disposed on the exterior surface of the body, each compression strap being configured to selectively constrict around the body when the body is in the **tubular** configuration; and a tubular **compression sock** composed of a **resiliently stretchable** material, the **compression sock** being configured to encircle a portion of the body when the body is in the tubular configuration so as to radially inwardly compress the body... ... a channel of a terminal portion at the end of the sleeve, the terminal portion being contoured to apply progressive pressure to the hand or **foot along** the **length** thereof without adjustment or applying external force to the terminal portion; and applying an external pressure force to the sleeve over the arm or leg... **Technology Focus** ...further comprises a cover layer mounted to the inner layer so as to directly cover the pressure projections. The cover layer comprises a sheet of **resiliently stretchable** material. The **compression garment** further comprises **compression** straps secured to or encircling the garment body. The garment body has an interior surface and an exterior surface with a maximum non-compressed thickness... **Extension Abstract** Original Publication Data by

AuthorityArgentina**Publication No.** ...**Claims:**layer and the inner layer; andmeans for constricting at least a portion of the body when the body is in the at least substantially **tubular** configuration.20. A **compression garment** system for **compressing** at least a portion of an arm or a leg of a patient, the compression garment system comprising: a body having a substantially tubular configuration... ... on the exterior surface of the body, each compression strap being configured to selectively constrict around the body when the body is in the substantially **tubular** configuration; anda tubular **compression sock** comprised of a **resiliently stretchable** material, the **compression sock** being configured to encircle at least a portion of the body when the body is in the substantially tabular configuration so as to radially inwardlythe compression sleeve is in the substantially **tubular** configuration; ora tubular **compression sock** comprised of a **resiliently stretchable** material that can be selectively pulled over the body.Basic Derwent Week: 200541

33/3,K/3 (Item 3 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0014831324 *Drawing available*
WPI Acc no: 2005-179014/200519
XRPX Acc No: N2005-149062
Support device for patellar tendon of knee, has pair of straps extended from back of elastic sleeve, inserted through closure at sides of sleeve and folded to engage hook and loop faster together for applying force
Patent Assignee: CLEMENTS K (CLEM-I); ENSLEY P S (ENSL-I); LAY A L W (LAYA-I)
Inventor: CLEMENTS K; ENSLEY P S; LAY A L W

Patent Family (1 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 6863657	B1	20050308	US 2003726088	A	20031202	200519	B

Priority Applications (no., kind, date): US 2003726088 A 20031202
Original Abstracts:A device for providing support, compression, and warmth to the patellar tendon of a knee, the device including an **elastic sleeve**, a **compressible tubular member** secured **along the** circumferential length of the sleeve; first and second straps secured adjacent the exterior of the sleeve and generally diametrically across the sleeve from the tubular... ...**Claims:**is claimed is:1. A device for providing support, compression, and warmth to the patellar tendon of a knee, the device comprising an elastic sleeve **having** a circumferential **length** and **opposite interior** and exterior surfaces; a **compressible tubular** member having first and second opposite ends and secured along the circumferential length of the sleeve; first and second steps secured adjacent the exterior of... ... the first strap having a hook surface and an adjacent loop surface and being secured adjacent the exterior surface of the sleeve at a first **attachment point** and the second strap having a **hook surface** and an adjacent loop **surface** and being secured adjacent the exterior surface of the sleeve at a second **attachment point** located generally adjacent to the first attachment point so that the first and second straps may be positioned to extend in generally opposite directions around the exterior circumference of the sleeve, a first strap closure member secured adjacent the exterior surface of the sleeve and positioned between **the** first attachment **point** and the first end of the tubular member; and a second strap closure member secured adjacent the exterior surface of the sleeve and positioned between **the** second attachment **point** and the second end of the tubular member, wherein the device is positionable **on** the **knee** so that the tubular **member** is **generally** oriented across a front portion of the knee adjacent the patellar tendon and the device may be tensioned to provide compression and support to the... Basic Derwent Week: 200519

33/3,K/4 (Item 4 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0014472223 *Drawing available*
WPI Acc no: 2004-663731/200465
XRPX Acc No: N2004-525522
Restraining orthosis selection assisting device, has computer determining values of restraining pressure to be exerted by orthosis on person from two data files established by installation and strain gauge
Patent Assignee: INNOTHERAPIE LAB SA (INNO-N); LAB INNOTHERA (INNO-N); LAB INNOTHERA SA (INNO-N); LAB INNOTHERA SAS (INNO-N); BASSEZ S (BASS-I); TESTUD J (TEST-I)
Inventor: BASSEZ S; TESTUD J; TESTUD J L

Patent Family (11 patents, 107 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
FR 2852421	A1	20040917	FR 20034931	A	20030422	200465	B
WO 2004095342	A2	20041104	WO 2004FR976	A	20040421	200472	E
EP 1616281	A2	20060118	EP 2004742553	A	20040421	200606	E
			WO 2004FR976	A	20040421		
BR 200409665	A	20060418	BR 20049665	A	20040421	200628	E
			WO 2004FR976	A	20040421		
AU 2004232820	A1	20041104	AU 2004232820	A	20040421	200637	E
KR 2006012274	A	20060207	WO 2004FR976	A	20040421	200660	E
			KR 2005720137	A	20051022		
CN 1791876	A	20060621	CN 200480014005	A	20040421	200674	E
US 20070055537	A1	20070308	WO 2004FR976	A	20040421	200720	E
			US 2006553877	A	20060905		
JP 2007526949	W	20070920	WO 2004FR976	A	20040421	200763	E
			JP 2006505805	A	20040421		
AU 2004232820	B2	20090924	AU 2004232820	A	20040421	200965	E
CN 100489873	C	20090520	CN 200480014005	A	20040421	200970	E

Priority Applications (no., kind, date): FR 20034931 A 20030422

The former data file has **three dimensional** coordinates of meshing **points** distributed at the **surface** of the person along a succession of contours defined at different successive sides of the person. The values of the restraining pressure determined by the... ...ADVANTAGE - The device effectively enables a doctor to evaluate the adaptation of the dimension of the orthosis to the **morphology** of the **leg** of a given patient, to choose the prosthesis that is likely to procure the optimal therapeutic effect in the patient...

Claims:1. A device for assistance in the **selection** of a **compression orthosis** and in adapting same to the **morphology** of a **limb** for which the orthosis is intended, characterized in that it comprises: means (**26**) for establishing a first file containing data representative of the **morphological** characteristics of the **limb** (**30**), this first data file comprising the coordinates, in a **three**-dimensional **space**, of a array of **points** (**68**) distributed **on** the **surface** of the **limb along** a succession of **contours** (**66**) defined at different successive coordinates (Z) of that limb;means (**10**) for establishing a second file containing data representative of the dimensional and Theological characteristics of the orthosis defined at different successive coordinates (Z) of that **orthosis;compression**

simulation means (**48**) able to determine, using data from the first and second files, compression pressure values that are liable to be exerted by the orthosis **on** the **limb** at a plurality of points of said array; andmeans (**50**) for displaying said pressure values determined by the compression simulation means.Basic Derwent Week: 200465

33/3,K/5 (Item 5 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0013680632 *Drawing available*
WPI Acc no: 2003-777269/200373
XRAM Acc no: C2003-213781
XRPX Acc No: N2003-622836
Stretchable apparatus used to compress medication to extremity or thorax of human or animal, comprises elastic sleeve with tight fitting configuration or with skintight fitment
Patent Assignee: CLINTON D O (CLIN-I)
Inventor: CLINTON D O

Patent Family (2 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 20030094179	A1	20030522	US 2001988481	A	20011119	200373	B
US 6892733	B2	20050517	US 2001988481	A	20011119	200533	E

Priority Applications (no., kind, date): US 2001988481 A 20011119
.NOVELTY - A stretchable apparatus comprises an elastic sleeve (A) with a tight fitting configuration **around** an **appendage**, **extremity** or thorax; and an **elastic sleeve** with skintight fitment that **compresses** the appendages, neck or thorax through out its length and circumference to prevent the loss of bodily fluids. ...tube open at both ends configured to have a stretch of at least twice its original diameter; an elastic sleeve with a tight fitting configuration **around** an **appendage**, **extremity** or thorax; and an **elastic sleeve** with skintight fitment that **compresses** the appendages, neck or thorax through out its length and circumference to prevent the loss of bodily fluids... Original Publication Data by AuthorityArgentina**Publication No. Original Abstracts:**The nature of the invention is to thoroughly compress the entire length and circumference of **a** medical site, **limb**, torso, neck, **arm and leg** with **a** tubular **elastic** sleeve that has openings at both ends. The I.V. **Sleeve** has bands of **compressed elastic** reinforcement about **its circumference** and equidistant throughout its entire length. The purposes of the bands are to reinforce the I.V. Sleeve and protect the compressed integrity of the... ... The nature of the invention is to thoroughly compress the entire length and circumference of a medical site, **limb**, torso, **neck**, **arm** and **leg** with a **tubular elastic** sleeve that **has** openings **at** both ends. **The I.V. Sleeve** has bands of **compressed elastic** reinforcement about its **circumference** and equidistant throughout **its entire** length. The purposes of the bands are to reinforce the I.V. Sleeve and protect the compressed integrity of the remainder of the site and...
...**Claims:**tube open at both ends configured to have a stretch of at least twice its original diameter.an elastic sleeve with a tight fitting configuration **around** an **appendage**, **extremity** or thorax.an **elastic sleeve with** skintight fitment that **compresses** the **appendages**, neck **or thorax** throughout its **length** and circumference **to prevent** the loss of bodily **fluids**.Basic Derwent Week: 200373

33/3,K/6 (Item 6 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0012417734 *Drawing available*
WPI Acc no: 2002-362139/200239

XRAM Acc no: C2002-102438
XRPX Acc No: N2002-283095
Bandage, useful for the treatment of pressure sores, bedsores or sporting injuries, consists of extensible, flexible textile material, part of which is molded into an elastomeric material, and surplus textile material encircles pad
Patent Assignee: MERRILD B K Y (MERR-I); NIELSEN L N (NIEL-I)
Inventor: MERRILD B K Y; NIELSEN L N

Patent Family (2 patents, 94 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
WO 2002017840	A1	20020307	WO 2001DK526	A	20010807	200239	B
AU 200179595	A	20020313	AU 200179595	A	20010807	200249	E

Priority Applications (no., kind, date): DK 2000263 U 20000828
Original Abstracts: The product is a **bandage** for the treatment **of pressure** sores, bedsores and **similar** mainly human ailments. The **bandage** consists of an extensible, **flexible** textile material which serves primarily for the fixing of a pressure-relieving padding or pad which is placed over the affected area of the body... ... polymer gel, which is moulded into a pad adapted to the area of the body in question. The bandage's physical form is generally determined **by** the **part** of the **body which** is to **be** treated. In principle, all areas of the body can be treated. The product's novelty consists in the textile material being moulded into the elastomeric... ... so that the finished bandage has pads only opposite those parts of the body which are to be treated (relieved of pressure), while the other **part** of the **bandage** serves to fix the padding against the body...

33/3,K/10 (Item 10 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0009709092 *Drawing available*
WPI Acc no: 1999-527742/199944
XRAM Acc no: C1999-155158
XRPX Acc No: N1999-390864
Fitting procedure and aid for putting on compressive support hose
Patent Assignee: GARDON-MOLLARD C (GARD-I); INNOTHERA TOPIC INT (INNO); INNOTHERA TOPIC INT SA (INNO)
Inventor: GARDON M C; GARDON-MOLLARD C

Patent Family (18 patents, 28 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
WO 1999044558	A1	19990910	WO 1999FR454	A	19990302	199944	B
FR 2775431	A1	19990903	FR 19982487	A	19980302	199944	E
AU 199926293	A	19990920	AU 199926293	A	19990302	200007	E
BR 199908461	A	20001114	BR 19998461	A	19990302	200064	E
			WO 1999FR454	A	19990302		
EP 1059907	A1	20001220	EP 1999906315	A	19990302	200105	E
			WO 1999FR454	A	19990302		
CN 1291876	A	20010418	CN 1999803553	A	19990302	200141	E
KR 2001041409	A	20010515	KR 2000709542	A	20000828	200167	E

JP 2002505158	W	20020219	WO 1999FR454	A	19990302	200216	E
			JP 2000534164	A	19990302		
AU 743484	B	20020124	AU 199926293	A	19990302	200221	E
US 6523729	B1	20030225	WO 1999FR454	A	19990302	200323	E
			US 2000622907	A	20001222		
EP 1059907	B1	20031015	EP 1999906315	A	19990302	200368	E
			WO 1999FR454	A	19990302		
RU 2212872	C2	20030927	WO 1999FR454	A	19990302	200371	E
			RU 2000124874	A	19990302		
US 20030216676	A1	20031120	WO 1999FR454	A	19990302	200377	E
			US 2000622907	A	20001222		
			US 2003337410	A	20030107		
DE 69912104	E	20031120	DE 69912104	A	19990302	200401	E
			EP 1999906315	A	19990302		
			WO 1999FR454	A	19990302		
ES 2209400	T3	20040616	EP 1999906315	A	19990302	200442	E
CN 1248664	C	20060405	CN 1999803553	A	19990302	200661	E
KR 567038	B1	20060404	WO 1999FR454	A	19990302	200724	E
			KR 2000709542	A	20000828		
CA 2320847	C	20080513	CA 2320847	A	19990302	200835	E
			WO 1999FR454	A	19990302		

Priority Applications (no., kind, date): FR 19982487 A 19980302

.NOVELTY - The procedure consists of fitting a sleeve (10) of a low friction material **on** the affected **limb**, which may previously have bandages or dressings applied to it. The compressive support hose (18), e.g. in the form of a sock, stocking or... Original Publication Data by AuthorityArgentina**Publication No. Original Abstracts:**The invention concerns a method comprising the following steps: a) wrapping the limb (22), if required with dressings or bandages present **on** said **limb**, over a **length** corresponding at least to the length of the orthotic device (18), with a flexible sleeve (10) made from a material with low friction coefficient and high tensile and tear strength; b) pulling on and setting in place the orthotic device **on** the part of the **limb** wrapped with the sleeve, said operation being manually carried out by slipping over its entire length the orthotic device on the sleeve inserted between orthotic... ...

What is claimed is:1. A method of putting **a tubular compressive** orthosis (**18**) such as a stocking, tights, or a sock of knitted elastic textile material onto a limb, optionally with dressings or bandages **present** on **the** limb, the method being characterized by the following steps:a) **the** limb is enveloped, over **a** length corresponding at least to the length of the orthcsis, in a flexible sleeve (**10**) of a material that presents a low coefficient of friction a...
Basic Derwent Week: 199944

33/3,K/15 (Item 15 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0009055667
WPI Acc no: 1998-051989/199805
XRAM Acc no: C1998-017781
XRPX Acc No: N1998-041262
Compressive orthosis for treating circulatory diseases of lower limbs - comprises tubular upper portion of variable section, and lower non-compressive portion covering foot, for use in venous ulcer treatment
Patent Assignee: INNOTHERA TOPIC INT (INNO); INNOTHERA TOPIC INT SA (INNO)
Inventor: GARDON M C; GARDON-MOLLARD C

Patent Family (20 patents, 27 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
WO 1997047262	A1	19971218	WO 1997FR1067	A	19970613	199805	B
FR 2749754	A1	19971219	FR 19967397	A	19960614	199807	E
AU 199733480	A	19980107	AU 199733480	A	19970613	199820	E
EP 927014	A1	19990707	EP 1997929345	A	19970613	199931	E
			WO 1997FR1067	A	19970613		
CN 1222067	A	19990707	CN 1997195482	A	19970613	199945	E
BR 199710851	A	20000111	BR 199710851	A	19970613	200020	E
			WO 1997FR1067	A	19970613		
JP 2000512176	W	20000919	WO 1997FR1067	A	19970613	200050	E
			JP 1998501316	A	19970613		
KR 2000016657	A	20000325	WO 1997FR1067	A	19970613	200104	E
			KR 1998710256	A	19981214		
AU 727960	B	20010104	AU 199733480	A	19970613	200107	E
EP 927014	B1	20010912	EP 1997929345	A	19970613	200155	E
			WO 1997FR1067	A	19970613		
DE 69706692	E	20011018	DE 69706692	A	19970613	200169	E
			EP 1997929345	A	19970613		
			WO 1997FR1067	A	19970613		
ES 2162310	T3	20011216	EP 1997929345	A	19970613	200206	E
US 20020029012	A1	20020307	WO 1997FR1067	A	19970613	200221	E
			US 1999202361	A	19990107		
			US 2001986009	A	20011107		
US 6371933	B1	20020416	WO 1997FR1067	A	19970613	200232	E
			US 1999202361	A	19990107		
RU 2196561	C2	20030120	WO 1997FR1067	A	19970613	200320	E
			RU 1999100637	A	19970613		
US 6572574	B2	20030603	WO 1997FR1067	A	19970613	200339	E
			US 1999202361	A	19990107		
			US 2001986009	A	20011107		

CN 1141068	C	20040310	CN 1997195482	A	19970613	200578	E
CA 2258119	C	20060404	CA 2258119	A	19970613	200625	E
			WO 1997FR1067	A	19970613		
KR 479502	B	20050809	WO 1997FR1067	A	19970613	200662	E
			KR 1998710256	A	19981214		
JP 4065566	B2	20080326	WO 1997FR1067	A	19970613	200824	E
			JP 1998501316	A	19970613		

Priority Applications (no., kind, date): FR 19967397 A 19960614

Original Abstracts: An orthosis (1) for applying decreasing pressure from the **ankle along** all or part of the leg is disclosed. The **orthosis** comprises a **compressive** knitted **tubular** portion (2) with a variable cross-section consisting of a support stocking leg portion with no foot or heel portions, said compressive tubular portion having... ... The orthosis (**1**) is designed to apply degressive compression to all or part of the leg starting from the ankle The **orthosis** has a knitted **compressive tubular** portion (**2**) of varying section formed by a leg portion of an elastic stocking that does not have a foot or a heel, said compressive... .

33/3,K/16 (Item 16 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0008452187
WPI Acc no: 1997-225938/199720
XRAM Acc no: C1997-072362
XRPX Acc No: N1997-186955

Therapeutic heat treatment body support sleeve - has patch of heat retaining closed cell foam laminate with holes extending through heat retaining layers for control of moisture.

Patent Assignee: BECTON DICKINSON & CO (BECT); TRU-FIT MARKETING CORP (TRUF-N)
Inventor: CAPRIO L

Patent Family (12 patents, 72 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 1997012570	A1	19970410	WO 1996US15966	A	19961003	199720	B
AU 199672572	A	19970428	AU 199672572	A	19961003	199733	E
EP 855888	A1	19980805	EP 1996934063	A	19961003	199835	E
			WO 1996US15966	A	19961003		
US 5925010	A	19990720	US 1995538782	A	19951003	199935	E
			US 1997869474	A	19970605		
AU 714588	B	20000106	AU 199672572	A	19961003	200013	E
BR 199610770	A	19991221	BR 199610770	A	19961003	200017	E
			WO 1996US15966	A	19961003		
MX 199802622	A1	19990501	MX 19982622	A	19980403	200056	E
CA 2233483	C	20020115	CA 2233483	A	19961003	200215	E
			WO 1996US15966	A	19961003		
MX 203463	B	20010802	MX 19982622	A	19980403	200238	E

EP 855888	B1	20021218	EP 1996934063	A	19961003	200301	E
			WO 1996US15966	A	19961003		
DE 69625497	E	20030130	DE 69625497	A	19961003	200317	E
			EP 1996934063	A	19961003		
			WO 1996US15966	A	19961003		
ES 2188792	T3	20030701	EP 1996934063	A	19961003	200347	E

Priority Applications (no., kind, date): US 1995538782 A 19951003; WO 1996US15966 A 19961003; US 1997869474 A 19970605

. ... Elastic athletic or orthopedic supports (10) for body parts such as the knee, thigh **or** ankle have **a** generally **tubular sleeve** (14) made of an **elastic** "multi-directional" resilient stretch fabric that surrounds the body part. A patch (20) having at least one lamination of neoprene (24) or the like is attached within the sleeve. The patch is sized, shaped and positioned on the support element to provide a therapeutic warming to only **a** portion of **the body part**. Preferably the patch includes the second lamination of an absorbent fabric liner (26) that is coextensive with, and secured to, the neoprene layer. The neoprene... ...**Claims:**An elastic support (10) for a body part (12) which is a knee or elbow, where the support provides strategically **placed** therapeutic heat treatment to a **selected portion** (28) of that body part comprising,

a main elastic support member (14) formed of a multi-directional stretch fabric that surrounds the body part (12) in a stretched condition when in use,

a patch (20) of a flexible laminate having a body heat retaining **layer** (**24**) which is sized, **shaped** and located on said inner surface of said main elastic support member to provide the therapeutic treatment only to the selected body portion (28),

attachment...

43/3,K/4 (Item 4 from file: 350)

DIALOG(R)File 350: Derwent WPIX

0002312295

WPI Acc no: 1981-M1127D/198147

Varicose vein medical stocking selection - by stocking shaped elastic envelope fitting and its blowing up and transverse tension measurement

Patent Assignee: TEXTILE-HABERD IND (TEXT-R)

Inventor: FILATOV V N

Patent Family (1 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
SU 806030	B	19810223	SU 2654692	A	19780815	198147	B

Priority Applications (no., kind, date): SU 2654692 A 19780815

Alerting Abstract ...The method is used to select medical stockings for patients with varicose veins. The method is carried out by **determining** the stocking **pressure on** the **leg** various sections. To ensure accurate selection, a stocking shaped elastic envelope is fitted **on** the patients **leg**. A pipe is **placed** between the envelope and the **leg** and is blown up with simultaneous transverse elastic envelope tension **measurement** at the **ankle**, shin and hip. The medical stocking is then fitted on the elastic stocking shaped mould. The mould is blown up until the radius of the mould and the leg become equal. If the envelope and the medical **stocking** transverse **tension** coincides the **stocking** is correctly **chosen**. Bul. 7/23.2.81. (2pp)

44/3,K/9 (Item 9 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0009561774 *Drawing available*
WPI Acc no: 1999-508090/199942
Related WPI Acc No: 1999-346934
XRPX Acc No: N1999-378638
Adjustable orthotic leg and foot brace fabricating method for therapeutic treatment of patient
Patent Assignee: DETORO W W (DETO-I)
Inventor: DETORO W W

Patent Family (1 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 5944679	A	19990831	US 199814365	A	19980127	199942	B
			US 1998174669	A	19981019		

Priority Applications (no., kind, date): US 199814365 A 19980127; US 1998174669 A 19981019
.**Original Abstracts:**method of forming an ankle and foot orthosis brace for use in supporting and immobilization of a patient's ankle and foot. The brace is **of** a multiple part L-**shaped** configuration with a **contoured leg** support portion and **a** foot portion interconnected by an incrementally adjustable hinge assembly therebetween. The method defines multiple fabrication steps that utilize a cast of the patient's leg... **Claims:**A method of forming a custom therapeutic leg and **foot** brace **for** use **on** a **patient**; said method comprises the following steps of;a. making a cast representation of the patient's leg and foot;b. **building** up **selected** areas **on** said cast to accommodate anatomical protrusions associated with said patient's anatomy;c. defining attachment points on said cast by temporarily positioning a **hinge** assembly on said cast **surface**, the hinge assembly being substantially behind the patient's heel, and the hinge assembly having a locking mechanism;d. securing spacers to said cast at... ... cutting away a custom leg portion and a custom foot portion;i. securing said hinge assembly to said cut away leg portion and cut away **foot** portion to **form** a **customized therapeutic leg** and foot **brace** so that said leg portion and foot portion are **hinged** allowing dorsi-flexion and **plantar-flexion of** the patient**s** foot;j. applying said custom therapeutic **leg** and **foot** brace **on** a patient's **leg** and foot, adjusting the brace for dorsi-flexion or plantar-flexion using said **hinge** assembly **and** locking **said** hinge assembly using **said** locking mechanism.

44/3,K/10 (Item 10 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0009487891 *Drawing available*
WPI Acc no: 1999-429764/199936
XRPX Acc No: N1999-319933
Peripheral circulatory disorder treatment device
Patent Assignee: WERDING W (WERD-I)
Inventor: WERDING W

Patent Family (7 patents, 80 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
WO 1999025305	A1	19990527	WO 1998IB1795	A	19981111	199936	B
AU 199896410	A	19990607	AU 199896410	A	19981111	199943	E

EP 1030640	A1	20000830	EP 1998950266	A	19981111	200042	E
			WO 1998IB1795	A	19981111		
JP 2001522706	W	20011120	WO 1998IB1795	A	19981111	200204	E
			JP 2000520740	A	19981111		
US 6500192	B1	20021231	WO 1998IB1795	A	19981111	200305	E
			US 2000554411	A	20000512		
EP 1030640	B1	20030723	EP 1998950266	A	19981111	200356	E
			WO 1998IB1795	A	19981111		
DE 59809107	G	20030828	DE 59809107	A	19981111	200357	E
			EP 1998950266	A	19981111		
			WO 1998IB1795	A	19981111		

Priority Applications (no., kind, date): CH 19972618 A 19971113

Original Abstracts:the opening (5) of the rubber disk (4). When the pressure changes in the treatment cylinder (1),the rubber membranes (6,7) adapt to the **form** of the **extremity to** be treated (**E**) to create a sleeve effect and close the end of treatment cylinder (1) in such a way that the intensity of the pressure variation can... ... The device comprises a treatment cylinder (**1**) into which one **extremity** (E) is **placed** for treatment of a peripheral circulatory disorder **and** subjected to **hyperbaric** and hypobaric phases. Said treatment cylinder has one end (B) that is hermetically closed, and on the other end (A) supports a sleeve (C) that... ... 5) of the rubber disk (**4**) so that during pressure changes in the treatment cylinder (**1**) the rubber membranes (**6, 7**) adapt so to the **form** of the **extremity** (E) to be treated that **they create** a **sleeve** effect and close off the treatment cylinder (**1**) at the end (A) in such a way **that** the intensity **of** the pressure variation can be achieved and kept constant during a specific time period without having to inflate the sleeve (C). This solution prevents for... ... is placed and subjected to hyper and hypobar phases. Said treatment cylinder has one end (B) which is hermetically closed and supports a sleeve (C) **on** the other end (**A**). Said sleeve consists of a thick-walled rubber disk (4) with flat sides that are covered by thin-walled, highly elastic rubber membranes (6). The... ... the opening (5) of the rubber disk (4). When the pressure changes in the treatment cylinder (1),the rubber membranes (6,7) adapt to the **form** of the **extremity** to be treated (E) to create a sleeve effect and close the end of treatment cylinder (1) in such a way that the intensity of the pressure variation can be achieved and kept constant during a specific **time** period without **having** to inflate the sleeve (C). This solution prevents the venous return to the heart from becoming blocked for the entire duration of treatment.... ...**Claims:**membranes (**6**, **7**) is freely floating relative to disk (**4**) so that the second openings (**7**, **8**) of the membranes (**6**, **7**) adapt to the **form** of the body **limb** and between the membranes an air cushion (**6**A) is formed.

44/3,K/11 (Item 11 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0009089958 *Drawing available*
WPI Acc no: 1999-008536/199901
XRPX Acc No: N1999-006150

Ankle and foot support brace for treatment and prevention of injuries - has outer mono-unit strapping system around inner slide-on sleeve which mimic support provided by tendons and ligaments of foot musculature, a plantar cushion allows conformity to orthotic requirements of user

Patent Assignee: BRAMLETT K W (BRAM-I); VAZQUEZ R M (VAZQ-I)
Inventor: BRAMLETT K W; VAZQUEZ R M

Patent Family (1 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 5833640	A	19981110	US 1997798914	A	19970212	199901	B

Priority Applications (no., kind, date): US 1997798914 A 19970212

Original Abstracts:resilient material such as Spandex. The plantar cushion may be removable or permanently attached to the brace and can further be personalized in its makeup **to** form a **therapeutic orthotic**. The mono-**unit strapping** system is also thin, made of strong resilient composite, and having a thickness commensurate with the sleeve and includes two heel lock straps, two stirrup... **Claims:** A lower leg, ankle and foot support system for preventing, treating, and rehabilitating injuries to lower leg, ankle joints, and foot musculature **comprising**: a) an inner slide-**on** sleeve; b) a plantar cushion; and c) an outer mono-unit strapping system; said inner slide-**on** sleeve further having a **leg**, a medial, a lateral, **a** dorsal arch and a **plantar surfaces**, said sleeve further having smooth texture across said **leg**, **medial**, lateral, dorsal arch and plantar **surfaces**, said plantar **surface** further having an outer circumference along which said outer mono-unit strapping system is attached; said inner slide-on sleeve also having a tongue, and a plurality of shoe lace eyelets, said tongue attached to said sleeve at a position on said sleeve above where the **ankle** joints of a user **would** rest when the sleeve is in use, said sleeve further having a shaped top that is higher on an anterior side than on a posterior side of said sleeve such that said shaped top is conformable to muscles of the lower **leg** when the **sleeve** is in use; said plantar cushion having a **predetermined shape** and elasticity to conform to orthotic requirements of a user, said cushion connected to said sleeve below said plantar surface; said outer mono-unit strapping...

44/3,K/13 (Item 13 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0007906214 *Drawing available*
WPI Acc no: 1996-393108/199639

Compression hose for exerting tissue pressure on arm of patient - has shoulder part, partially covering shoulder joint, which in use extends past h-line running vertically from armpit to shoulder line

Patent Assignee: BARBE-VICUNA A M L (BARB-I); BARBE-VICUNA L (BARB-I); BARBE-VICUNA T E (BARB-I)
Inventor: BARBE VICUNA A M L; BARBE VICUNA T E; BARBE-VICUNA A M L; BARBE-VICUNA T E

Patent Family (9 patents, 12 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
WO 1996025131	A2	19960822	WO 1996NL74	A	19960216	199639	B
NL 199500307	A	19961001	NL 1995307	A	19950217	199644	E
WO 1996025131	A3	19961031	WO 1996NL74	A	19960216	199651	E
AU 199648479	A	19960904	AU 199648479	A	19960216	199705	E
			WO 1996NL74	A	19960216		
EP 957855	A2	19991124	EP 1996904354	A	19960216	199954	E
			WO 1996NL74	A	19960216		
US 6338722	B1	20020115	WO 1996NL74	A	19960216	200208	E
			US 1997894301	A	19970815		
EP 957855	B1	20030122	EP 1996904354	A	19960216	200308	E
			WO 1996NL74	A	19960216		

DE 69625940	E	20030227	DE 69625940	A	19960216	200323	E
			EP 1996904354	A	19960216		
			WO 1996NL74	A	19960216		
ES 2191088	T3	20030901	EP 1996904354	A	19960216	200365	E

Priority Applications (no., kind, date): NL 1995307 A 19950217

Abstracts: The invention relates to a compression hose of elastic material for exerting tissue pressure **on** an **arm** of **a** patient, **in** which the compression hose comprises a shoulder part which partially covers the shoulder joint when in use, while fastening means for fastening the compression hose... .

. ... A compression device for exerting pressure **on** an **arm**, shoulder, and/**or** trunk **of** a patient in need thereof (for example, a patient with hyperalgia or recovering from surgery in which the lymphatic system is affected), including an arm compression hose, a shoulder **part** for exerting pressure **on** the shoulder and trunk area, and a band-shaped fastening means for positioning the shoulder part and exerting pressure **on** the shoulder part. The **arm** compression hose exerts a **pressure** that decreases from a maximum pressure at the wrist or hand to a minimum pressure near the shoulder end of the arm, where the minimum... ... to increase tissue pressure in one or more body areas in need thereof. The compression pads each can have a shape that approximately conforms to **the shape** of the **body part to** which it **is applied**. The shoulder part can also have a shape that approximately conforms to the contour of the shoulder/trunk area to which it is applied. In...

.**Claims:**Compression hose (10) of elastic material for exerting tissue pressure **on** an **arm** of a patient, in which the compression hose comprises **a** lower **arm** part covering at least a part of the lower arm and a shoulder part (12) which at least partially covers the shoulder joint when in... ... a shoulder, and a trunk of a patient in need thereof, and where said elastic material further comprises an inner side and an outer side, **where**: the **arm** comprises a **wrist**, an elbow, and a shoulder end; the trunk comprises a front, a back, a side ipsilateral to the arm, a side contralateral to the armnear the shoulder end; a shoulder part for **exerting** pressure **on** at least a portion of the shoulder and the trunk; and a fastening means fitted on the shoulder part, extending diagonally from the **shoulder** part, and wrapping **around** the patient from the side of the trunk ipsilateral to the **arm to** the side contralateral to the arm; applying and fitting the compression device to the body of the **patient**, comprising: **selecting** the **arm compression hose** elastic material to provide: a **maximum** compression value at the **wrist** from about 20 mm Hg to about 50 mm Hg; and a minimum compression value at the shoulder end of approximately 70 percent of the maximum compression value; and tightening the **fastening** means so **that the** shoulder part exerts a tissue pressure of approximately 70 percent of the maximum compression value.

44/3,K/15 (Item 15 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0007352509
WPI Acc no: 1995-083256/199512
XRAM Acc no: C1995-037424
XRPX Acc No: N1995-066053

Composite material for forming orthopaedic brace - comprises closed cell perforated foam centre section between layers of hydrophilic and hydrophobic fibre materials to dissipate body fluids

Patent Assignee: BECTON DICKINSON & CO (BECT); BECTON DICKINSON CO (BECT)
Inventor: HARRIS A R

Patent Family (6 patents, 7 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**

EP 639361	A1	19950222	EP 1994305798	A	19940804	199512	B
AU 199468850	A	19950223	AU 199468850	A	19940802	199515	E
CA 2129562	A	19950217	CA 2129562	A	19940805	199520	E
US 5449341	A	19950912	US 1993106682	A	19930816	199542	E
AU 673750	B	19961121	AU 199468850	A	19940802	199703	E
CA 2129562	C	19981215	CA 2129562	A	19940805	199909	E

Priority Applications (no., kind, date): US 1993106682 A 19930816

Claims:from said first surface to said second surface, said intermediate section having multidimensional elastic properties sufficient for providing compressive strain useful for support of the **body part**, said intermediate section **first surface** being bonded to a **surface** of said user contacting section and said second surface being bonded to said first fabric of said outermost section... ... second surface, said intermediate section having multidimensional elastic properties sufficient for providing compressive strain useful for support of the body part, said intermediate section first **surface** being bonded **to a surface** of said user **contacting** section and said second surface being bonded to said first fabric layer of said outermost section; and an outermost fabric section being a two layer...

B. Patent Files, Full-Text

```
  File 348:EUROPEAN PATENTS 1978-200936
         (c) 2009 European Patent Office
  File 349:PCT FULLTEXT 1979-2009/UB=20090827|UT=20090709
         (c) 2009 WIPO/Thomson
  File 325:Chinese Patents Fulltext 1985-20100331
         (c) 2010

Set     Items   Description
S1      86827   (ORTHOSIS OR ORTHOSES OR ORTHESIS OR ORTHESES OR ORTHOTIC?
             ? OR BRACE OR BRACES OR BANDAG? OR SOCK? ? OR STOCKING? ? OR -
             PANTYHOSE OR HOSIERY OR SLEEVE OR SLEEVES OR GARMENT? ? OR TI-
             GHTS OR HOSE OR BOOT OR BOOTS OR PROSTHES?S)(4N)(COMPRESS? OR
             CONSTRICT? OR PRESSUR? OR TENSION OR ORTHOPAEDIC OR ORTHOPEDIC
              OR THERAPEUTIC)
S2       6174   (TUBULAR? OR TUBE OR TUBED OR TUBES OR TUBIFORM? OR TUBELI-
             KE OR CYLINDRIC?)(4N)S1
S3       4896   (ELASTIC? OR RESILIENT? OR FLEXILE OR FLEXIBL? OR STRETCHA-
             BLE OR TENSILE OR STRETCHY)(4N)S1
S4      38799   (LIMB OR LIMBS OR LEG OR LEGS OR ARM OR ARMS OR THIGH? ? OR
              CALF OR (BODY OR BODILY OR BODIES)(2N)PART? ? OR ANKLE OR AN-
             KLES OR WRIST OR WRISTS OR KNEE OR KNEES OR BODYPART? ? OR AP-
             PENDAGE OR APPENDAGES OR EXTREMITY OR EXTREMITIES OR FEET OR -
             FOOT)
S5      10934   (SHAPE OR SHAPED OR SHAPES OR MORPHOLOG? OR FORM OR STRUCT-
             URE OR CURVATURE? ? OR DIMENSION? ? OR CONTOUR? ? OR SIZE OR -
             SIZES OR SIZING OR MEASUREMENT? ? OR LENGTH OR WIDTH) (4N)S4
S6      25558   (POINT? ? OR COORDINATE? ? OR SITES OR SITE OR SPOT OR SPO-
             TS OR PLACE? ? OR POSITION? ?)(5N)(AXIS OR AXES OR SURFACE OR
             SURFACES OR GRAPH? OR IMAGE OR SPACE OR SPACES OR S4)
S7        238   (3D OR (THREE OR MULTI OR MULTIPLE)()DIMENSION? OR MULTIDI-
             MENSIONAL OR STEREOSCOP?)(4N)S6
```

```
S8      19526   (SURFACE OR SURFACES OR ALONG OR ON OR SKIN OR EXTERIOR OR
             FACE OR FACES OR OUTSIDE OR AROUND OR SURROUNDING OR OVERLAID
             OR OVERLAY? OR OVERLYING)(4N)S4
S9      10028   (CALCULAT? OR DETERMIN? OR COMPUTE OR COMPUTES OR COMPUTED
             OR COMPUTING OR COMPUTATION OR ESTABLISH? OR ASSESS? OR DERIV?
              OR OBTAIN?)(3N)(COMPRESSION? ? OR TENSION? ? OR PRESSURE? ? -
             OR FORCE OR FORCES)
S10        38   (LAPLACE?? OR LA()PLACE??)(3N)(LAW OR LAWS OR RULE OR RULES
              OR EQUATION? ? OR FORMULA? ? OR ALGORITHM? ? OR FUNCTION? ? -
             OR CALCULATION? ? OR PRINCIPLE? ?)
S11      1731   (SELECT? OR CHOOSE OR CHOSEN OR CHOOSING OR PICK? OR IDENT-
             IFY? OR DESIGN? OR CHOICE? ? OR DECIDE? ? OR DECIDING OR FIND?
              OR CREAT? OR CUSTOMIZ? OR CUSTOMIS? OR PERSONALIZ? OR PERSON-
             ALIS? OR INDIVIDUALIZ? OR INDIVIDUALIZ?)(4N)S1
S12       322   S2 (5N) S3
S13         5   S5 (20N) S7 (20N) S8
S14         0   S12 (F) S13
S15        10   S11 (F) S10
S16        76   S11 (S) S9
S17        13   S16 (S) S8
S18         0   S17 (S) S7
S19         0   S16 (S) S7
S20         6   S17 (S) S6
S21         3   S17 (S) S5
S22        13   S16 (S) (S5 OR S6)
S23         0   S11 (S) S7
S24       228   S1 (F) S7
S25        21   S24 (S) S9
S26         4   S25 (S) S8
S27         9   S25 (S) S5
S28         4   S12 (S) S5
S29         0   S12 (F) S7
S30         2   S12 (S) S8 (S) S9
S31         0   S12 (F) S10
S32        41   S11 (S) S5
S33        12   S32 (S) S6
S34        10   S33 (S) S8
S35         2   S34 (S) S9
S36        39   (S13 OR S15 OR S20 OR S21 OR S22 OR S26 OR S27 OR S28 OR S-
              30 OR S35)
S37        14   S36 NOT AY>2003
S38         9   S36 NOT PY>2003
S39        14   S37 OR S38
S40        38   (S17 OR S25 OR S34) NOT S39
S41        10   S40 NOT AY>2003
S42         8   S40 NOT PY>2003
S43        10   S42 OR S41
S44        11   S1 (30N) S10
S45        10   S44 NOT (S39 OR S43)
S46         5   AU=((BASSEZ, S? OR BASSEZ S? OR BASSEZ(2N)S?) OR (TESTUD, -
              J? OR TESTUD J? OR TESTUD(2N)J?))
```

DIALOG(R)File 348: EUROPEAN PATENTS

36/3K/1 (Item 1 from file: 348)
00746583
FORMED RESILIENT ORTHOPAEDIC DEVICE
GEFORMTE ELASTISCHE ORTHOPADISCHE VORRICHTUNG
DISPOSITIF ORTHOPEDIQUE SOUPLE MOULE
Patent Assignee:

- **ROYCE MEDICAL COMPANY** (1046942)
  742 Pancho Road; Camarillo, California 93012 (US)
  (Proprietor designated states: all)

Inventor:

- **GRIM, Tracy, E.**
  3010 West Boston Court; Broken Arrow, OK 74012; (US)
- **O'DONNELL, Kevin, R.**
  282 West Sidlee Street; Thousand Oaks, CA 91360; (US)
- **BOBROFF, Alec, D.**
  12865 Glen Brae Drive; Saratoga, CA 95070; (US)
- **HOLT, Mark, D.**
  12570 Sunnyglen Street; Moorpark, CA 93021; (US)
- **IGLESIAS, Joseph, M.**
  5300 Oak Park Lane 104; Agoura, CA 93101; (US)
- **BOURNE, John, M.**
  1323 S. Gertruda Avenue; Redondo Beach, CA 90277; (US)
- **ARNOLD, William, K.**
  2330 E. Delmar; Pasadena, CA 91107; (US)

Legal Representative:

- **Hallam, Arnold Vincent et al (31455)**
  Marks & Clerk 5 The Quadrant; Coventry CV1 2EL; (GB)

	Country	Number	Kind	Date	
Patent	EP	824337	A1	19980225	(Basic)
Patent	EP	824337	A1	19980225	
Patent	EP	824337	B1	20031203	
	WO	95032690		19951207	
Application	EP	95921590		19950601	
	WO	95US7028		19950601	
Priorities	US	252600		19940601	

pecification: ...company is Rubatex Corporation of Bedford, Virginia.
Fig. 10 is a comparison of the stretch characteristics of compressed and uncompressed foam rubber. This figure was **derived** from **tension** tests of uncompressed, and compressed samples of neoprene that were supplied to the inventors by the Rubatex Corporation. Each of the samples had a testing... ...10 illustrates, the compressed and uncompressed materials behave similarly at low loads. However, as the load increases, the compressed material tends to stretch more than **the** uncompressed material. By applying **this** principle to **foam** rubber **orthopaedic** support **design**, a **designer** may control the stretch characteristics of a support by varying the degree to which different regions of the support are compressed. Furthermore, because the support pressure of a foam rubber support is related to its stretch characteristics, the **designer** may simultaneously control the **pressure** that the **brace** exerts at different areas of an injured part of the human anatomy.
Now turning **to** one specific **embodiment** of the invention, Fig. 1 shows an orthopaedic knee brace 18. The brace has been compression molded to have a number of features. Strip pads...

DIALOG(R)File 348: EUROPEAN PATENTS

39/3K/1 (Item 1 from file: 348)
01685689

Mapping catheter

Mappingkatheter

Catheter de cartograhpie

Patent Assignee:

- **Biosense Webster, Inc.** (3024380)
  3333 Diamond Canyon Road; Diamond Bar, CA 91765 (US)
  (Proprietor designated states: all)

Inventor:

- **Ben-Haim, Shlomo**
  8 Efroni St., Cluster 10; Caesarea 38900; (IL)
- **Greenberg, Ilan**
  15 Geula Street; 33198 Haifa; (IL)
- **Fenster, Maier**
  IC Toscanini Street; 49354 Petach Tikva; (IL)
- **Behar, Boaz**
  30 Hamagal Street; 55402 Kiriat-Ono; (IL)

Legal Representative:

- **Mercer, Christopher Paul et al (46612)**
  Carpmaels & Ransford 43-45 Bloomsbury Square; London WC1A 2RA; (GB)

	Country	Number	Kind	Date	
Patent	EP	1382293	A2	20040121	(Basic)
Patent	EP	1382293	A3	20040128	
Patent	EP	1382293	B1	20080702	
Application	EP	2003077584		19970108	
Priorities	IL	11669996		19960108	
	US	9769	P	19960111	
	US	595365		19960201	
	US	11721	P	19960215	

Claims: ...plurality of arms (62, 64, 66; 322); (ii) an electrode (26, 28, 30; 332) fixed to each arm (62, 64, 66; 322); and (iii) a **position** sensor **on** each of the **arms** for generating **three-dimensional** location information indicative of the position of the electrode (26, 28, 30; 332) of said arm; wherein the arms (62, 64, 66; 322) are held...

DIALOG(R)File 348: EUROPEAN PATENTS

43/3K/2 (Item 2 from file: 348)
00865375
Integrated system for foot measurement, last and footwear manufacture
Integriertes System zum Messen des Fusses sowie zur Herstellung des Leistens und des Schuhes
Systeme integre de mesure de pied et de fabrication de formes et de chaussures
Patent Assignee:

- **FOOT IMAGE TECHNOLOGY, INC.** (1564840)
  1620 S.W. Overturf; Bend, OR 97702 (US)
  (Proprietor designated states: all)

Inventor:

- **White, Jay P.**
  1620 Southwest Overturf; Bend, Oregon 97702; (US)
- **Sweasy, William J., Jr.**
  11330 Panama Avenue South; Hastings, Minnesota 55033; (US)
- **Goggin, Joseph P.**
  625 Pine Street; Red Wing, Minnesota 55066; (US)
- **Thies, Wesley A.**
  454 West 7th Street; Red Wing, Minnesota 55066; (US)

Legal Representative:

- **Eisenfuhr, Speiser & Partner (100151)**
  Martinistrasse 24; 28195 Bremen; (DE)

	Country	Number	Kind	Date	
Patent	EP	793922	A1	19970910	(Basic)
Patent	EP	793922	B1	20010502	
Application	EP	97103335		19900514	
Priorities	US	520534		19900511	
	US	520621		19900511	

Specification: ...menu/screen display 322, shown in Figure 61, is presented on display 122. The user may select a particular boot internal perimeter outline (BIPO) to **overlay** the scanned **foot** image currently selected by selecting a particular BIPO size. After selecting the particular BIPO size to overlay on the image 323 of the scanned foot... ...on display 122. As shown in menu/screen display 324, a double-lined boot image 325 (also referred to as a liner region image) is **overlaid on** a scanned **foot** image. By manipulating menu options 321, the double-lined boot image outline 325 may be moved with respect to the foot image. After placing the boot image 325 precisely, a user may **choose** to show the particular pressure **points** between the **boot** and scanned **foot** image. Upon choosing to view the pressure points, menu/screen 326, as shown in Figure 63, is presented on display 122. Menu/screen display 326... ...from the inner lining pressing against the foot. This allows the user to adjust the size of the boot desired to properly fit the scanned **foot** with an optimally chosen **size** of boot and liner in accordance with the pressure preferences for the owner of the particular foot which has been scanned. From menu/screen display...

DIALOG(R)File 348: EUROPEAN PATENTS

45/3K/2 (Item 2 from file: 348)
01991845

IMPROVEMENTS RELATING TO SOCKS

VERBESSERUNGEN IM ZUSAMMENHANG MIT SOCKEN

AMELIORATIONS RELATIVES A DES CHAUSSETTES

Patent Assignee:

- **ConvaTec Technologies Inc.** (101080378)
  6100 Neil Road, Suite 500; Reno NV 89511 (US)
  (Proprietor designated states: all)

Inventor:

- **ADAMS, Simon Mark**
  Mantova,Brynford Road; Holywell,Flintshire CH8 7RP; (GB)
- **BONNEFIN, Wayne Lee**
  12 Churton Road; Boughton,Chester, CH3 5EB; (GB)
- **HANMER, Paul**
  85 Ivygreen Road; ChorltonManchester M21 9FJ; (GB)
- **LINNANE, Patrick Gerard**
  3 Sweetfield Gardens; Little Sutton,Elsmere Port CH66 1HZ; (GB)
- **ROWLEY, Duncan John**
  7 Whitney Close; Greasby,Wirral CH49 3QR; (GB)
- **TABRON, Ian Stewart**
  Kima Top Road; Frodsham,Cheshire WA6 6SP; (GB)
- **WILD, David Geoffrey**
  96 Pipers Lane; Heswall,Wirral CH60 9HL; (GB)

Legal Representative:

- **Mays, Julie (100034939)**
  Barker Brettell LLP 10-12 Priests Bridge; LondonSW15 5JE; (GB)

	Country	Number	Kind	Date	
Patent	EP	1734841	A2	20061227	(Basic)
Patent	EP	1734841	B1	20101222	
	WO	2005094738		20051013	
Application	EP	2005729730		20050330	
	WO	2005GB1203		20050330	
Priorities	GB	407371		20040331	

Specification: ...sock other than the ankle portion and any cuff portion are knitted with an open stitch in order to generate minimal compression.

When considering the **pressure** applied to the **sock**, for example from a **compression** applying means, such as **bandages**, **compression stockings**, **LaPlace**'s **Law** applies. Therefore the pressure applied is inversely proportional to the radius, and pressure is higher along the shinbone. This is minimised by keeping the **pressure** applied by the **sock** as low as possible, without them falling down, in particular by having the portions of the sock other than the ankle portion and any cuff...

DIALOG(R)File 348: EUROPEAN PATENTS

45/3K/3 (Item 3 from file: 348)
01035820
BLOOD VESSEL PROSTHESIS
BLUTGEFASSPROTHESE
PROTHESE DE VAISSEAU SANGUIN
Patent Assignee:

- **TERUMO KABUSHIKI KAISHA** (200695)
  44-1, Hatagaya 2-chome, Shibuya-ku; Tokyo 151-0072 (JP)
  (Proprietor designated states: all)

Inventor:

- **KOBAYASHI, Fumiaki,Terumo Kabushiki Kaisha**
  1500,IInokachi,Nakai-machi,Ashigarakami-gun; Kanagawa 259-0151; (JP)

Legal Representative:

- **Gillard, Marie-Louise et al (15871)**
  Cabinet Beau de Lomenie 158, rue de l'Universite; 75340 Paris Cedex 07; (FR)

	Country	Number	Kind	Date	
Patent	EP	1016384	A1	20000705	(Basic)
Patent	EP	1016384	B1	20080813	
	WO	1999012496		19990318	
Application	EP	98941757		19980908	
	WO	98JP4015		19980908	
Priorities	JP	97243214		19970908	

Specification: ...less risk of breakage or the diastasis of the anastomotic part if separation does occur at worst. The force applied to the tubular blood vessel **prosthesis** by blood **pressure** is derived from the **rule** of **Laplace**: (wherein T: tensile strength along the circumferential direction, (Pe-Pi): pressure difference between the outside and the inside (blood pressure), (gamma): inner diameter of the ...

45/3K/8 (Item 5 from file: 349)
DIALOG(R)File 349: PCT FULLTEXT

01348799
A TRANSDUCER APPARATUS FOR MEASURING BIOMEDICAL PRESSURES
DISPOSITIF A TRANSDUCTEUR POUR MESURER DES PRESSIONS BIOMEDICALES
Patent Applicant/Patent Assignee:

- **UNIVERSITY OF LIMERICK**
  Plassey Technological Park, Limerick; IE; IE (Residence); IE (Nationality); (For all designated states except: US)

Patent Applicant/Inventor:

- **CASEY Vincent**
  Foxgrove House, Rockbarton, Bruff, County Limerick; IE; IE (Residence); IE (Nationality); (Designated only for: US)

Legal Representative:

- **O'BRIEN John A et al (agent)**
  c/o John A. O'Brien & Associates, Third Floor, Duncairn House, 14 Carysfort Avenue, Blackrock, County Dublin; IE

	Country	Number	Kind	Date
Patent	WO	200630405	A1	20060323
Application	WO	2005IE100		20050914
Priorities	US	2004609245		20040914

Detailed Description:
...measuring biomedical pressures"
INTRODUCTION
This invention pertains to transducers for estimating the pressure applied to body-tissue by an object such as a medical device, **bandage** or dressing.

The **pressure** developed, P, beneath a membrane is governed by the tension, T, in the membrane and the curvature, ic, of the membrane according to the **law** of **Laplace**, P=TK. In the case of bandages and wound dressings applied to cylindrical bodies, i.e. a **compression bandage** on a limb, the form P=NTIr is frequently used by clinicians to estimate the bandage applied pressure, where N is the number of complete... ...establish a constant extension in the bandage as it is applied, typically 50% extension.

However, bandage extension only provides a crude estimate of the actual **tension** in the **bandage** and so **pressures** calculated using the **law** of **Laplace** cannot be expected to reflect the actual sub-**bandage pressure** at a given location on a limb or support tissue with a great degree of accuracy.

45/3K/9 (Item 6 from file: 349)
DIALOG(R)File 349: PCT FULLTEXT

01298278
PRESSURE GARMENT
VETEMENT COMPRESSIF
Patent Applicant/Patent Assignee:

- **THE UNIVERSITY OF MANCHESTER**
  Oxford Road, Manchester Lancashire M13 9PL; GB; GB(Residence); GB(Nationality); (For all designated states except: US)

Patent Applicant/Inventor:

- **DIAS Tilak**
  6 Briar Hollow, Heaton Mersey, Stockport Cheshire SK4 2EE; GB; GB(Residence); GB(Nationality); (Designated only for: US)

- **COOKE William**
  9 Howey Hill, Congleton Cheshire CW12 4AA; GB; GB(Residence); GB(Nationality); (Designated only for: US)
- **FERNANDO Anura**
  12 Heatherside, St Paul's Garden, Stalybridge Cheshire SK15 2QN; GB; GB(Residence); LK(Nationality); (Designated only for: US)
- **JAYAWARNA Dimuth**
  4 Ridgecroft, Limehurst Estate, Ashton-under-Lyne Lancashire OL7 9TG; GB; GB(Residence); LK(Nationality); (Designated only for: US)
- **CHAUDHURY Najmal Hassan**
  14 Alston Avenue, Sale Cheshire M33 4AS; GB; GB(Residence); GB(Nationality); (Designated only for: US)

Legal Representative:

- **HITCHCOCK Esmond Antony(et al)(agent)**
  Lloyd Wise, McNeight & Lawrence, Commonwealth House, 1 - 19 New Oxford Street, London Greater London WC1A 1LW; GB

	Country	Number	Kind	Date
Patent	WO	2005106087	A1	20051110
Application	WO	2005GB1697		20050504
Priorities	GB	20049970		20040504

Detailed Description:
...as beyond this it will be difficult to pull a stiff stocking over the heel of the foot.

The accepted formula to calculate the sub **bandage pressure** is derived from
the **Laplace equation** as follows;
P = (TN x 4630) / CW
where P = **pressure** (in mmHg)
T = **bandage tension** (in kgo
C = circumference of the limb (in cm)
W bandage width (in cm)
N number of layers applied
Using the above equation, assuming a...

IV. Text Search Results from Dialog

A. NPL Files, Abstract

```
  File  35:Dissertation Abs Online 1861-2009/Aug
        (c) 2009 ProQuest Info&Learning
  File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
        (c) 2002 Gale/Cengage
  File  65:Inside Conferences 1993-2009/Sep 08
        (c) 2009 BLDSC all rts. reserv.
  File   2:INSPEC 1898-2009/Aug W4
        (c) 2009 The IET
  File 474:New York Times Abs 1969-2009/Sep 08
        (c) 2009 The New York Times
  File 475:Wall Street Journal Abs 1973-2009/Sep 08
        (c) 2009 The New York Times
  File  99:Wilson Appl. Sci & Tech Abs 1983-2009/Aug
        (c) 2009 The HW Wilson Co.
  File 256:TecTrends 1982-2009/Aug W5
        (c) 2009 Info.Sources Inc. All rights res.
  File   5:Biosis Previews(R) 1926-2011/Jan W3
        (c) 2011 The Thomson Corporation
  File  73:EMBASE 1974-2011/Jan 21
        (c) 2011 Elsevier B.V.
  File 155:MEDLINE(R) 1950-2011/Dec 29
        (c) format only 2011 Dialog
  File  34:SciSearch(R) Cited Ref Sci 1990-2011/Jan W3
        (c) 2011 The Thomson Corp
  File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
        (c) 2006 The Thomson Corp
  File  14:Mechanical and Transport Engineer Abstract 1966-2011/Jan
        (c) 2011 CSA.

Set     Items   Description
S1      32022   (ORTHOSIS OR ORTHOSES OR ORTHESIS OR ORTHESES OR ORTHOTIC?
             ? OR BRACE OR BRACES OR BANDAG? OR SOCK? ? OR STOCKING? ? OR -
             PANTYHOSE OR HOSIERY OR SLEEVE OR SLEEVES OR GARMENT? ? OR TI-
             GHTS OR HOSE OR BOOT OR BOOTS OR PROSTHES?S)(4N)(COMPRESS? OR
             CONSTRICT? OR PRESSUR? OR TENSION OR ORTHOPAEDIC OR ORTHOPEDIC
              OR THERAPEUTIC)
S2    2559296   (LIMB OR LIMBS OR LEG OR LEGS OR ARM OR ARMS OR THIGH? ? OR
              CALF OR (BODY OR BODILY OR BODIES)(2N)PART? ? OR ANKLE OR AN-
             KLES OR WRIST OR WRISTS OR KNEE OR KNEES OR BODYPART? ? OR AP-
             PENDAGE OR APPENDAGES OR EXTREMITY OR EXTREMITIES OR FEET OR -
             FOOT)
S3     122248   (SHAPE OR SHAPED OR SHAPES OR MORPHOLOG? OR FORM OR STRUCT-
             URE OR CURVATURE? ? OR DIMENSION? ? OR CONTOUR? ? OR SIZE OR -
             SIZES OR SIZING OR MEASUREMENT? ? OR LENGTH OR WIDTH) (4N)S2
S4     541608   (POINT? ? OR COORDINATE? ? OR SITES OR SITE OR SPOT OR SPO-
             TS OR PLACE? ? OR POSITION? ?)(5N)(AXIS OR AXES OR SURFACE OR
             SURFACES OR GRAPH? OR IMAGE OR SPACE OR SPACES OR S2)
S5      10648   (3D OR (THREE OR MULTI OR MULTIPLE)()DIMENSION? OR MULTIDI-
             MENSIONAL OR STEREOSCOP?)(4N)S4
S6     356635   (SURFACE OR SURFACES OR ALONG OR ON OR SKIN OR EXTERIOR OR
             FACE OR FACES OR OUTSIDE OR AROUND OR SURROUNDING OR OVERLAID
             OR OVERLAY? OR OVERLYING)(4N)S2
S7     358610   (CALCULAT? OR DETERMIN? OR COMPUTE OR COMPUTES OR COMPUTED
```

```
             OR COMPUTING OR COMPUTATION OR ESTABLISH? OR ASSESS? OR DERIV?
              OR OBTAIN?)(3N)(COMPRESSION? ? OR TENSION? ? OR PRESSURE? ? -
             OR FORCE OR FORCES)
S8       21306   (LAPLACE?? OR LA()PLACE??)(3N)(LAW OR LAWS OR RULE OR RULES
              OR EQUATION? ? OR FORMULA? ? OR ALGORITHM? ? OR FUNCTION? ? -
             OR CALCULATION? ? OR PRINCIPLE? ?)
S9        1556   (SELECT? OR CHOOSE OR CHOSEN OR CHOOSING OR PICK? OR IDENT-
             IFY? OR DESIGN? OR CHOICE? ? OR DECIDE? ? OR DECIDING OR FIND?
              OR CREAT? OR CUSTOMIZ? OR CUSTOMIS? OR PERSONALIZ? OR PERSON-
             ALIS? OR INDIVIDUALIZ? OR INDIVIDUALIZ?)(4N)S1
S10        922   S1 AND S3
S11          0   S10 AND S5
S12        115   S10 AND S4
S13         68   S12 AND S6
S14         26   S13 AND S7
S15          1   S14 AND S8
S16          0   S14 AND S9
S17          6   S8 AND S9
S18         23   S1 AND S7 AND S8
S19         11   S18 AND (S3 OR S4 OR S6)
S20         75   S9 AND S7
S21          0   S20 AND S5
S22          2   S20 AND S3
S23          6   S20 AND S4
S24         14   S20 AND S6
S25         12   (S15 OR S17 OR S19 OR S22 OR S23 OR S24) NOT PY>2003
S26          6   RD  (unique items)
S27        186   AU=((BASSEZ, S? OR BASSEZ S? OR BASSEZ(2N)S?) OR (TESTUD, -
             J? OR TESTUD J? OR TESTUD(2N)J?))
S28          9   S27 AND S1
```

26/3,K/1 (Item 1 from file: 5)
DIALOG(R)File 5: Biosis Previews(R)

14148535 **Biosis No.:** 199799782595
Evaluation of pressure gradients and variability following Unna boot application

Author: Molina Hector G; Chung Jiyearn; Cabellon Paul C; Simsir Sinan A; Kohlman-Trigoboff Debra; Smith Bruce M (Reprint)
Author Address: 110 Irving St., NW, Room 1084, Washington, DC 20010, USA**USA
Journal: Vascular Surgery 31 (5): p 583-586 1997 1997
ISSN: 0042-2835
Document Type: Article
Record Type: Abstract
Language: English

Abstract: The authors evaluated subbandage pressures generated by a standardized compression bandaging technique. Subbandage **pressure** was **determined** following paste-gauze application to an artificial leg by use of air-filled bladders coupled to a pressure transducer. Mean pressures and ankle-to-knee **pressure** gradients were **calculated**. The mean variability in pressure at each **position** was also **determined**. Mean knee **pressures** were significantly less than those at the **ankle on** the medial and lateral sides of the leg (P lt 0.004 and P lt 0.02, respectively). Variations in pressure generated by each wrapper over three trials were not significant. A three-layered **compression bandaging** technique was used to **create** a moderate pressure gradient from ankle to knee. The effectiveness of compression bandaging does not necessarily depend on the generation of high subbandage

pressures.

Dialog eLink: USPTO Full Text Retrieval Options
26/3,K/2 (Item 1 from file: 73)
DIALOG(R)File 73: EMBASE

0077697830 **EMBASE/MEDLINE No:** 1999184022
Long cotton wool rolls as compression enhancers in macrosclerotherapy for varicose veins

Tazelaar D.J.; Neumann H.A.M.; De Roos K.P.
Department Dermatology, Ziekenhuis De Tjongerschans, Heerenveen, Netherlands
Corresp. Author/Affil: Neumann H.A.M.: Department of Dermatology, Academisch Ziekenhuis Maastricht, Postbus 5800, 6202 AZ Maastricht, Netherlands

Dermatologic Surgery (Dermatol. Surg.) (United States) June 10, 1999 , 25/1 (38-40)
CODEN: DESUF **ISSN:** 1076-0512
Item Identifier (DOI): 10.1046/j.1524-4725.1999.08005.x
Document Type: Journal ; Article **Record Type:** Abstract
Language: English **Summary language:** English
Number of References: 14

...in combination with compression has proven to be safe and effective in the treatment of varicose veins. Local compression is increased by pads, according to **Laplace law**. Firm rolls of cotton wool are fixed over the course of the entire vein to increase local compression and to reduce complications. Additional compression is given by a combination of a class I (daytime and nighttime) and class II (daytime only) medical **compression hosiery**. PURPOSE. To evaluate the effectiveness and side effects of sclerocompression therapy with cotton wool rolls in combination with medical **compression hosiery**. METHOD. Prospective study with 100 patients (120 legs) with primary varicose veins, which are treated with polidocanol as sclerosant with the empty vein technique. Immediately after the injection, a long cotton wool roll is placed over the entire vein and fixed. Additional **compression** is **obtained** with class I and class II medical **compression hosiery**. The interface **pressure** on the skin, just under the cotton wool roll, is measured **on** 12 **legs** with the aid of an interface pressure measuring instrument (Oxford Pressure Monitor). RESULTS. Good sclerosing results are obtained in all patients. Side effects are classified...

Dialog eLink: USPTO Full Text Retrieval Options
26/3,K/3 (Item 2 from file: 73)
DIALOG(R)File 73: EMBASE

0077620750 **EMBASE/MEDLINE No:** 1999106909
Compression therapy: Theory and practice

Kunimoto B.T.
Department of Medicine, Division of Dermatology, University of British Columbia, Vancouver, BC, Canada
Corresp. Author/Affil: Kunimoto B.T.: Department of Medicine, Division of Dermatology, University of British Columbia, Vancouver, BC, Canada

Dermatologic Therapy (Dermatol. Ther.) (Denmark) May 4, 1999 , 9/- (63-68)
CODEN: DETHF **ISSN:** 1396-0296
Document Type: Journal ; Review **Record Type:** Abstract
Language: English **Summary language:** English
Number of References: 16

Compression therapy using **bandages** or **stockings** is absolutely necessary for the successful management of venous leg ulcers. The **law** of **Laplace** dictates that the **pressure obtained** under a **bandage** depends **on** the radius of the **leg**. Modifications can be made that can increase compression locally which may be important in some cases. Short stretch bandages are the most effective in edema reduction. Long stretch systems can be used later. The four-layer **bandage** system can achieve high **compression** that is well sustained. Graduated **compression stockings** are essential for the prevention of venous ulceration but are often not worn despite the best of efforts.

Dialog eLink: USPTO Full Text Retrieval Options
26/3,K/4 (Item 3 from file: 73)
DIALOG(R)File 73: EMBASE

0076401333 **EMBASE/MEDLINE No:** 1996076291
Inflatable brace-related streaming potentials in living canine tibias

Otter M.W.; Bronk J.T.; Wu D.D.; Bieber W.A.; Kelly P.J.; Cochran G.V.B.
Orthoped. Eng. and Research Center, Helen Hayes Hospital, West Haverstraw, NY, United States; VA Medical Center, Castle Point, NY, United States; Department of Orthopaedics, SUNY, Health Sciences Center T18-030, Stony Brook, NY 11794, United States
Corresp. Author/Affil: Otter M.W.: Department of Orthopaedics, Health Sciences Center, SUNY, Stony Brook, NY 11794, United States

Clinical Orthopaedics and Related Research (CLIN. ORTHOP. RELAT. RES.) (United States) March 14, 1996 , -/324 (283-291)
CODEN: CORTB **ISSN:** 0009-921X
Document Type: Journal ; Article **Record Type:** Abstract
Language: English **Summary language:** English
Number of References: 24

...biomechanical testing. Pulsatile transcortical electric potentials were caused by the fluctuations in intramedullary pressure that result from active circulation. This report describes a collaborative effort **designed** to **determine** whether **pressure** fluctuations within an inflatable **brace**, **placed** over a canine **calf**, can affect endogenous transcortical electric potentials. Pressure within a brace placed over a canine hindlimb was observed to oscillate between 20 and 52 mm Hg...
Medical Descriptors:
*
animal model; article; biomechanics; bone density; cortical bone; dog; electric potential; hindlimb; immobilization; **leg** movement; nonhuman ; osteotomy; pressure **measurement**; priority journal
Orig. Descriptors:

Dialog eLink: USPTO Full Text Retrieval Options
26/3,K/5 (Item 1 from file: 155)
DIALOG(R)File 155: MEDLINE(R)

12301198 **PMID:** 9021623
Interface pressures and shear stresses at thirteen socket sites on two persons with transtibial amputation.

Sanders J E; Lam D; Dralle A J; Okumura R
Center for Bioengineering, University of Washington, Seattle 98195, USA.
sanders@limbs.bioeng.washington.edu
Journal of rehabilitation research and development (UNITED STATES) Jan 1997 , 34 (1) p19-43 , **ISSN:** 0748-7711--Print 0748-7711--Linking **Journal Code:** 8410047
Publishing Model Print
Document type: Journal Article; Research Support, U.S. Gov't, P.H.S.
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
...total-contact patellar-tendon-bearing prostheses. Maximal interface stresses during stance phase for each of 13 transducer sites were determined, then means for all steps **calculated**. Maximal **pressure** and resultant shear stress during stance phase were shown at anterior distal or mid-**limb sites** and the maxima occurred during the first 50% of stance phase. Anterior medial and lateral proximal sites showed their greatest pressure during the second 50%. At lateral mid- **limb** and popliteal fossa **sites**, resultant shear stress directions suggest that soft tissue was displaced toward the socket brim during weight-bearing. Results also suggest that skin across the distal... (
Descriptors: ; Adult; Biomechanics; Humans; Leg; Middle Aged; **Pressure**; **Prosthesis Design**; Transducers; Weight-Bearing
Named Person:

Dialog eLink: USPTO Full Text Retrieval Options
26/3,K/6 (Item 1 from file: 34)
DIALOG(R)File 34: SciSearch(R) Cited Ref Sci

05155788 **Genuine Article#:** VD691 **No. References:** 39
Title: EFFECT OF SUSTAINED REGIONAL COMPRESSION ON LOWER-EXTREMITY SKIN MICROCIRCULATION
Author: MAYROVITZ HN; DELGADO M
Corporate Source: MIAMI HEART RES INST,DEPT VASC & PHYSIOL RES,4701 N MERIDIAN AVE/MIAMI BEACH//FL/33322
Journal: WOUNDS-A COMPENDIUM OF CLINICAL RESEARCH AND PRACTICE , 1996 , V 8 , N4 (JUL-AUG) , P 111-117
ISSN: 1044-7946
Language: ENGLISH **Document Type:** ARTICLE (Abstract Available)
Title: EFFECT OF SUSTAINED REGIONAL COMPRESSION ON LOWER-EXTREMITY SKIN MICROCIRCULATION
Abstract: Laser-Doppler blood perfusion was measured **on foot** dorsum (lateral and medial) and medial lower calf before (10 minutes), during (40 minutes) and after (10 minutes) of lower leg regional external compression

at... ...subjects are directly applicable to the regional compression employed but are believed to represent an upper bound on that to be expected with full leg **compression bandaging**. The **findings** reinforce the need for caution regarding therapeutic compression levels in patients with reduced vascular function. Because the effects are manifested distally, appropriate and timely perfusion monitoring at distal un-compressed sites may be efficacious to **assess** patient-by-patient **compression** effects and help guide the choice of appropriate compression levels.
Descriptors:

B. NPL Files, Full-text

```
  File  15:ABI/Inform(R) 1971-2009/Sep 07
        (c) 2009 ProQuest Info&Learning
  File   9:Business & Industry(R) Jul/1994-2009/Sep 05
        (c) 2009 Gale/Cengage
  File 610:Business Wire 1999-2009/Sep 08
        (c) 2009 Business Wire.
  File 810:Business Wire 1986-1999/Feb 28
        (c) 1999 Business Wire
  File 275:Gale Group Computer DB(TM) 1983-2009/Aug 07
        (c) 2009 Gale/Cengage
  File 624:McGraw-Hill Publications 1985-2009/Sep 08
        (c) 2009 McGraw-Hill Co. Inc
  File 621:Gale Group New Prod.Annou.(R) 1985-2009/Jul 30
        (c) 2009 Gale/Cengage
  File 636:Gale Group Newsletter DB(TM) 1987-2009/Aug 13
        (c) 2009 Gale/Cengage
  File 613:PR Newswire 1999-2009/Sep 08
        (c) 2009 PR Newswire Association Inc
  File 813:PR Newswire 1987-1999/Apr 30
        (c) 1999 PR Newswire Association Inc
  File  16:Gale Group PROMT(R) 1990-2009/Aug 13
        (c) 2009 Gale/Cengage
  File 160:Gale Group PROMT(R) 1972-1989
        (c) 1999 The Gale Group
  File 634:San Jose Mercury  Jun 1985-2009/Sep 01
        (c) 2009 San Jose Mercury News
  File 148:Gale Group Trade & Industry DB 1976-2009/Aug 20
        (c) 2009 Gale/Cengage
  File  20:Dialog Global Reporter 1997-2009/Sep 08
        (c) 2009 Dialog
  File 149:TGG Health&Wellness DB(SM) 1976-2011/Jan W2
        (c) 2011 Gale/Cengage
  File 444:New England Journal of Med. 1985-2011/Jan W3
        (c) 2011 Mass. Med. Soc.
  File 129:PHIND(Archival) 1980-2011/Jan W3
        (c) 2011 Informa UK Ltd
  File 130:PHIND(Daily & Current) 2011/Jan 20
        (c) 2011 Informa UK Ltd

Set     Items   Description
S1      20471   (ORTHOSIS OR ORTHOSES OR ORTHESIS OR ORTHESES OR ORTHOTIC?
             ? OR BRACE OR BRACES OR BANDAG? OR SOCK? ? OR STOCKING? ? OR -
             PANTYHOSE OR HOSIERY OR SLEEVE OR SLEEVES OR GARMENT? ? OR TI-
             GHTS OR HOSE OR BOOT OR BOOTS OR PROSTHES?S)(4N)(COMPRESS? OR
             CONSTRICT? OR PRESSUR? OR TENSION OR ORTHOPAEDIC OR ORTHOPEDIC
              OR THERAPEUTIC)
```

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S2        106   (TUBULAR? OR TUBE OR TUBED OR TUBES OR TUBIFORM? OR TUBELI-
                KE OR CYLINDRIC?)(4N)S1
S3        650   (ELASTIC? OR RESILIENT? OR FLEXILE OR FLEXIBL? OR STRETCHA-
                BLE OR TENSILE OR STRETCHY)(4N)S1
S4   10693449   (LIMB OR LIMBS OR LEG OR LEGS OR ARM OR ARMS OR THIGH? ? OR
                 CALF OR (BODY OR BODILY OR BODIES)(2N)PART? ? OR ANKLE OR AN-
                KLES OR WRIST OR WRISTS OR KNEE OR KNEES OR BODYPART? ? OR AP-
                PENDAGE OR APPENDAGES OR EXTREMITY OR EXTREMITIES OR FEET OR -
                FOOT)
S5     275182   (SHAPE OR SHAPED OR SHAPES OR MORPHOLOG? OR FORM OR STRUCT-
                URE OR CURVATURE? ? OR DIMENSION? ? OR CONTOUR? ? OR SIZE OR -
                SIZES OR SIZING OR MEASUREMENT? ? OR LENGTH OR WIDTH) (4N)S4
S6     716176   (POINT? ? OR COORDINATE? ? OR SITES OR SITE OR SPOT OR SPO-
                TS OR PLACE? ? OR POSITION? ?)(5N)(AXIS OR AXES OR SURFACE OR
                SURFACES OR GRAPH? OR IMAGE OR SPACE OR SPACES OR S4)
S7       4173   (3D OR (THREE OR MULTI OR MULTIPLE)()DIMENSION? OR MULTIDI-
                MENSIONAL OR STEREOSCOP?)(4N)S6
S8    1911242   (SURFACE OR SURFACES OR ALONG OR ON OR SKIN OR EXTERIOR OR
                FACE OR FACES OR OUTSIDE OR AROUND OR SURROUNDING OR OVERLAID
                OR OVERLAY? OR OVERLYING)(4N)S4
S9     156679   (CALCULAT? OR DETERMIN? OR COMPUTE OR COMPUTES OR COMPUTED
                OR COMPUTING OR COMPUTATION OR ESTABLISH? OR ASSESS? OR DERIV?
                 OR OBTAIN?)(3N)(COMPRESSION? ? OR TENSION? ? OR PRESSURE? ? -
                OR FORCE OR FORCES)
S10       611   (LAPLACE?? OR LA()PLACE??)(3N)(LAW OR LAWS OR RULE OR RULES
                 OR EQUATION? ? OR FORMULA? ? OR ALGORITHM? ? OR FUNCTION? ? -
                OR CALCULATION? ? OR PRINCIPLE? ?)
S11       828   (SELECT? OR CHOOSE OR CHOSEN OR CHOOSING OR PICK? OR IDENT-
                IFY? OR DESIGN? OR CHOICE? ? OR DECIDE? ? OR DECIDING OR FIND?
                 OR CREAT? OR CUSTOMIZ? OR CUSTOMIS? OR PERSONALIZ? OR PERSON-
                ALIS? OR INDIVIDUALIZ? OR INDIVIDUALIZ?)(4N)S1
S12        10   S2 (5N) S3
S13         4   S5 (20N) S7 (20N) S8
S14         0   S13 (10N) S1
S15         2   S9 (10N) S10
S16         0   S15 (S) S11
S17         0   S15 (S) S1
S18       138   S1 (20N) S5
S19         0   S18 (F) S7
S20        15   S18 (F) S6
S21         6   S20 (S) S8
S22         0   S20 (S) S9
S23         0   S20 (S) S11
S24         2   S11 (F) S10
S25         4   S11 (S) S9
S26         0   S11 (S) S7
S27        20   S11 (S) S5
S28         0   S27 (S) S6
S29         2   S27 (S) (S2 OR S3)
S30        12   (S21 OR S24 OR S25 OR S29) NOT PY>2003
S31        11   RD  (unique items)
S32         0   AU=((BASSEZ, S? OR BASSEZ S? OR BASSEZ(2N)S?) OR (TESTUD, -
                J? OR TESTUD J? OR TESTUD(2N)J?))
```

31/3,K/1 (Item 1 from file: 15)
DIALOG(R)File 15: ABI/Inform(R)

00718283 93-67504
Medical clothing: A tutorial paper on pressure garments
Ng-Yip, Frency S F

International Journal of Clothing Science & Technology v5n1 pp: 17-24
1993
ISSN: 0955-6222 **Journal Code:** CST
Word Count: 4900
Text:
...cent and 10 per cent, so as to give the required pressure for the garments while reading the measurement directly from the measuring charts. The **established** specialist **pressure** garment manufacturers have developed their own, standard engineering formulae to determine the size of the pattern and subsequently **create** a gradient **pressure** within the **garment**. Measurements for garments are made using a patented tape-measure, and accurate longitudinal and circumferential dimensions are gauged at short intervals (e.g. every one...

31/3,K/2 (Item 1 from file: 636)
DIALOG(R)File 636: Gale Group Newsletter DB(TM)

04468835 **Supplier Number:** 56914727 **(USE FORMAT 7 FOR FULLTEXT)**
Compressive bandages and pressure garments.
Medical Textiles , p NA
Nov , 1999
Language: English **Record Type:** Fulltext
Document Type: Newsletter ; Trade
Word Count: 937
-
...term use of pressure garments often results from the poor physical appearance of the products and discomfort. In turn, discomfort can result from a poor **choice** of fabric or the **garment**'s construction.

Pressure garments must be worn for about 23.5 hours a day for at least nine months, and sometimes for more than two years, so it is...relies heavily on the experience of the therapist to produce a garment for individual cases.

Research undertaken at De Montfort University, Leicester, UK, on the **design** of **pressure garments** for the treatment of hypertrophic scarring was also described at the conference. The study, conducted by Brian Schofield (now of the Hong Kong Polytechnic University), aimed to develop a more precise method of cutting pressure garments to give the required compression.

The method is based on the **principle** of the **Laplace Law** and uses the relationship between measured skin-and-garment interface pressure, fabric tension and

---

31/3,K/3 (Item 1 from file: 16)
DIALOG(R)File 16: Gale Group PROMT(R)

06195673 **Supplier Number:** 54117643 **(USE FORMAT 7 FOR FULLTEXT)**
High pressure thermoplastic hose constructions utilizing TPVs.
Hill, M.C.; Ouhadi, T.
Rubber World , v 219 , n 5 , p 48(1)

Feb , 1999
Language: English **Record Type:** Fulltext
Document Type: Magazine/Journal ; Trade
Word Count: 2942
-
...thermoplastic hose construction using TPV materials that demonstrates high pressure and fluid resistant performance. The choice of reinforcement for the hose construction was important in **establishing** the high **pressure** rating of the **hose** assembly. Steel wire was **chosen** based on its ability to mechanically lock onto the thermoplastic tubing material during the braiding operation. The fabrication issues were then focused on developing adhesion...

31/3,K/4 (Item 2 from file: 16)
DIALOG(R)File 16: Gale Group PROMT(R)

02058457 **Supplier Number:** 42659946 **(USE FORMAT 7 FOR FULLTEXT)**
A supporting role
Chemist & Druggist , p 58
Jan 11 , 1992
Language: English **Record Type:** Fulltext
Document Type: Magazine/Journal ; Professional Trade
Word Count: 2209
-
...measurements should be taken on the bare leg. Three standard measurements should be taken at the: thinnest part of the ankle, fattest part of the **calf**, mid **point** of the **thigh**.
Where there is a closed toe, a foot measurement will also be necessary.
The best time to measure the leg is early in the day...

...stand so that the thigh muscles are firm. It is helpful to mark the outside of the leg using a non-toxic pen at the **point** where the **thigh** measurement is taken. This ensures accuracy in the repeat measurement.
Only rarely, where there is totally unusual leg measurements, will made-to-measure garments be...

31/3,K/5 (Item 1 from file: 148)
DIALOG(R)File 148: Gale Group Trade & Industry DB

15155206 **Supplier Number:** 92543867 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The conducting system, part III: putting it all together. (Hydraulic Systems Trends).
Henke, Russ
Diesel Progress North American Edition , 68 , 9 , 80(4)
Sept , 2002
ISSN: 1091-370X
Language: English

Record Type: Fulltext
Word Count: 1816 **Line Count:** 00266
...oil on the operator.
Obviously, when dealing with high pressure high-power systems there is no room for error.
Pressure is one of the primary **hose** selection criteria.
Initial **hose pressure** ratings are **determined** by machine designers to meet required performance parameters. When hoses are replaced in the field care must be taken to match the new hose to...

31/3,K/6 (Item 1 from file: 149)
DIALOG(R)File 149: TGG Health&Wellness DB(SM)

02153801 **Supplier Number:** 98134860 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Deep vein thrombosis and airline travel--the deadly duo. (Clinical).
Ball, Kay
AORN Journal , 77 , 2 , 346(8)
Feb ,
2003
Publication Format: Magazine/Journal
ISSN: 0001-2092
Language: English
Record Type: Fulltext; Abstract **Target Audience:** Professional
Word Count: 5253 **Line Count:** 00448
...formation of DVT. Graduated compression medical hosiery has been used for years as preventive and therapeutic measures for DVT, edema, varicose veins, and phlebitis. These **stockings** apply maximum pressure at the ankle with decreasing pressure up the **length** of the **leg** (Figure 1). Compression **on** the **leg surface** forces the blood to flow from the small surface vessels into the larger, deep venous system. This compression also supports faulty venous valves by preventing ...counterclockwise for 15 seconds. Reverse the circles for another 15 seconds and repeat if desired.
Foot pumps
Start with both heels on the floor and **point** your **feet** upward as high as you can. Put both **feet** fiat **on** the floor. Lift your heels high, keeping the balls of the **feet on** the floor.
Knee lifts
Lift one leg with the knee bent while contracting the thigh muscle. Alternate legs and repeat 20 to 30 times per leg.
Knee to...

31/3,K/7 (Item 2 from file: 149)
DIALOG(R)File 149: TGG Health&Wellness DB(SM)

01971359 **Supplier Number:** 70871436 (USE FORMAT 7 OR 9 FOR FULL TEXT)
TREATING BENIGN COLON DISORDERS USING LAPAROSCOPIC COLECTOMY.

COX, JOYCE A.; ROGERS, MARY A.; COX, STEVEN D.
AORN Journal , 73 , 2 , 375
Feb ,
2001
Publication Format: Magazine/Journal
ISSN: 0001-2092
Language: English
Record Type: Fulltext; Abstract **Target Audience:** Professional
Word Count: 9794 **Line Count:** 00816

...the patient state the allergy and the type of reaction that he or she suffered. If an allergy bracelet is not present, the perioperative nurse **places** one **around** the patient's **wrist.**

A physician's written ...last from one and one-half to three and one-half hours, the circulating nurse and the RNFA begin positioning with the patient in supine **position** with his or her **arms** tucked at the side. The perioperative nurse checks the patient's elbow and finger positions to avoid finger and ulnar nerve damage. The perioperative nurse and the RNFA raise the patient's **legs** and **place** them in self-balancing, padded stirrups that provide a wide spectrum of flexibility without compromising the patient's circulatory status. The patient's legs are...

...of the patient's bilateral posterior popliteal, posterior tibial, and dorsalis pedis pulses. The circulating nurse also must ensure that scrubbed personnel do not lean **on** the patient's **legs** and compromise circulation. Circulation checks are documented on the perioperative record.

At this time, the lower end of the bed is dropped as it normally...

31/3,K/8 (Item 3 from file: 149)
DIALOG(R)File 149: TGG Health&Wellness DB(SM)

01961904 **Supplier Number:** 68534741 (USE FORMAT 7 OR 9 FOR FULL TEXT)
THROMBOEMBOLIC PROPHYLAXIS WITH USE OF ASPIRIN, EXERCISE, AND GRADED ELASTIC STOCKINGS OR INTERMITTENT COMPRESSION DEVICES IN PATIENTS MANAGED WITH TOTAL HIP ARTHOPLASTY.(Brief Article)

KING, CECIL A.
AORN Journal , 72 , 6 , 1077
Dec ,
2000
Document Type: Brief Article **Publication Format:** Magazine/Journal
ISSN: 0001-2092
Language: English
Record Type: Fulltext **Target Audience:** Professional
Word Count: 784 **Line Count:** 00069

...was noted in this study.

Perioperative Implications.

The findings of this study suggest that an inexpensive protocol of aspirin, exercise, and the use of graded **elastic stockings** or intermittent **compression** devices is associated with reduced

postoperative thromboembolic complications. Researchers did not indicate whether the mechanical methods used were **thigh**- or **knee**-high in **length**. Many hospitals are beginning to evaluate the use of non-pharmacologic prophylaxis for thromboembolism. Based on the findings of this study, it is suggested that the **choice** of graded **elastic stockings** or intermittent **compression** devices may increase patient comfort and compliance and also achieve a cost savings.

CECIL A. KING RN, MS, CNOR, CNS NURSING RESEARCH COMMITTEE

31/3,K/9 (Item 4 from file: 149)
DIALOG(R)File 149: TGG Health&Wellness DB(SM)

01713458 **Supplier Number:** 19671145 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Improving fit of artificial limbs. (Washington Univ School of Medicine researchers are using imaging technology to design artificial prostheses with better fit)(Brief Article)
USA Today (Magazine) , v126 , n2627 , p15(1)
August ,
1997
Document Type: Brief Article **Publication Format:** Magazine/Journal
ISSN: 0161-7389
Language: English
Record Type: Fulltext **Target Audience:** Consumer
Word Count: 570 **Line Count:** 00049
...University of lowa, lowa City, indicates that is a wide margin for error.

The standard plaster-casting technique provides a rigid, static copy of the **limb** in one set **position**. With just a rock-hard cast, it is impossible to address the shape changes of bone and tissue that occur while an amputee walks with the prosthesis. Just as the skin and soft tissue **on** the bottom of your **foot** are molded and **shaped** in a snug pair of shoes, the **shape** of the residual **limb** changes while **compressed** in a **prosthesis**. As a patient walks, **pressure points on** the **limb** vary with the body's shifting weight.

A technique called spiral computed tomography (CT) scanning allowed the researchers to study exact shape changes and correlate...

31/3,K/10 (Item 5 from file: 149)
DIALOG(R)File 149: TGG Health&Wellness DB(SM)

01682399 **Supplier Number:** 19252498 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Postsurgical hindfoot deformity of a patient with rheumatoid arthritis treated with custom-made foot orthoses and shoe modifications.
Shrader, Joseph A.; Siegel, Karen Lohmann
Physical Therapy , v77 , n3 , p296(10)
March ,
1997
Publication Format: Magazine/Journal

ISSN: 0031-9023
Language: English
Record Type: Fulltext; Abstract **Target Audience:** Professional
Word Count: 4828 **Line Count:** 00496
...old woman with a 30-year history of seropositive RA. She was nonambulatory due to a severe malalignment of her right hindfoot in a varus **position**. Right-**foot** weight bearing occurred exclusively through the fibular malleolus and the lateral head and base of the fifth metatarsal. The planter **surface** of the **foot** did not make contact with the floor. The patient could transfer independently to and from a wheelchair with the use of a standard cane. She...weeks postsurgery. The patient was using a standard cane in her left hand, was still wearing the leg-hindfoot orthosis, and was full weight bearing **on** her right lower **extremity**, although she had been instructed to wait until 12 weeks postsurgery to do so. She complained of right **ankle** pain, rated as 3 **on** a scale of 0 to 10 (0=no pain, 10=excruciating pain) during right stance phase and was developing skin irritation over the right lateral malleolus due to **pressure** from the leg-hindfoot **orthosis**. She stated, "I can't wait to stop using this brace." Extremely slow cadence, short left step **length**, decreased left hip and **knee** flexion and extension, and very little push-off on the left side were observed. The pelvis was clearly lower on the left side than on ...clip to help keep the patient's foot on the device. A lateral clip is a superiorly directed extension of the trim line of the **foot** orthosis that is **placed on** the lateral posterior aspect of the shell to keep the foot from sliding off the orthosis.
A left foot orthosis was also fabricated. This orthosis...

31/3,K/11 (Item 6 from file: 149)
DIALOG(R)File 149: TGG Health&Wellness DB(SM)

01374572 **Supplier Number:** 13090409 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Community clinics for leg ulcers and impact on healing.

Moffatt, Christine J.; Franks, Peter J.; Oldroyd, Margaret; Bosanquet, Nick ; Brown, Pearl; Greenhalgh, Roger M.; McCollum, Charles N.
British Medical Journal , v305 , n6866 , p1389(4)
Dec 5 ,
1992
Publication Format: Magazine/Journal
ISSN: 0959-8146
Language: English
Record Type: Fulltext; Abstract **Target Audience:** Professional
Word Count: 2296 **Line Count:** 00224
...mm Hg at the ankle graduated to under 20 mm Hg just below the knee.[4] The diameter of the ankle is important as the **pressure** beneath **elastic bandages** is greater for narrow ankles and least for wide ankles. Each four layer bandage may incorporate different **bandages designed** to achieve this **compression** sustained over at least one week, despite the wide range in **ankle**

sizes (table I).

Measurement of ulcer size and recording results--At each weekly follow up visit the total area of ulceration on each leg was traced on to clear...

V. Additional Resources Searched

Financial Times via ProQuest

No documents found for: ***((orthosis or orthoses or orthesis or ortheses or orthotic? or bandag* or stocking? or sock? or hosiery) w/3 compress* AND (Laplace or "La Place")) AND PDN(<4/21/2004)***

Internet and Personal Computing Abstracts via EBSCOhost